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ciena : the network specialist



engage. transform. evolve. annual report 2011



improved operating leverage
broadened customer relationships
accelerated growth strategy
enhanced product portfolio
expanded addressable markets and applications

Ciena is the network specialist. Ciena Corporation specializes in helping our customers transition their networks so they can better serve their customers in a rapidly evolving industry landscape. We offer leading network infrastructure solutions, intelligent software and a comprehensive services practice to help our customers use their networks to fundamentally change the way they compete. With a global presence, Ciena leverages its heritage of practical innovation to deliver maximum performance and economic value in communications networks worldwide.

Ciena's portfolio of software-centric optical and Ethernet platforms combine network element programmability, network automation and comprehensive network management to create a next-generation network on which new services and applications can be delivered. Our solutions form the foundation of many of the largest, most reliable and sophisticated service provider, enterprise, government, and research and education networks across the globe.



A letter from Gary B. Smith, President & Chief Executive Officer

Fiscal 2011 was a productive year for Ciena, during which we solidified a platform for growing our business, extended our technology leadership, grew faster than the market, and returned to as-adjusted profitability. As a result, we are in a strong position to deliver greater operating leverage and profitability by taking our differentiated strategy to the next level.

At a time when multiple demands and new applications are increasing their strain on legacy networks and business models, the market is rediscovering the importance of the network and the role it plays in providing a premium experience to end users. Simply put, the network matters again, and Ciena is leading the charge. As the network specialist, we place an emphasis on innovation that puts unprecedented levels of intelligence in the network to enable fast, reliable, secure communications, and we are uniquely placed with leading technologies and deep customer trust. This is a truly exciting time for the

industry—and especially for Ciena—as we are in the relatively early stages of a multi-year network modernization movement.

As we reflect on our performance in fiscal 2011, there were a number of key accomplishments that helped us achieve this position of strength. We met the last of our critical operational milestones for the integration of Nortel's Metro Ethernet Networks (MEN) business by completing the transition of all back-office operations to Ciena systems in the first quarter. By mid-year, we had

successfully integrated our product portfolio by cross-pollinating key technologies and bringing our entire solution set under unified management. Closing the chapter on the integration phase of our transformation then allowed us to turn our focus from combining operations to optimizing our systems and processes to gain additional efficiencies. And, we saw the initial results of those efforts reflected in the fourth quarter, including strong free cash flow, a second consecutive quarter of as-adjusted operating profitability, and \$600 million in cash and investments.

Revenue growth is critical to the continued improvement we expect in our financial position. Despite remaining uncertainty about the overall global economy, Ciena's revenue grew more than 10 percent in the second half of the year when comparing the respective periods of fiscal 2010 and 2011. This growth is attributable to a number of factors. First, our team was successful in leveraging Ciena's technology leadership to take market share from players across the competitive spectrum. Second, our ability to bring unique value to applications that are increasingly vital to networked communications was hard

2011 Major Wins

Our momentum can be measured by the diverse wins we've seen during the year—wins that span products, applications, and the globe.

Jan 25

Mobily Selects Ciena for Strategic Next-Generation Network in the Middle East

Oct 24

Fibertech Networks Selects Ciena to Deliver Mobile Backhaul Network

Feb 1

SEA-ME-WE 4 cable system to upgrade with 40G/100G technologies, significantly increasing its overall capacity

Oct 31

Southern Cross Cable Future Proofs Network with Ciena Upgrade

Mar 9

Ciena and Internet2 Partner on New National 100G Network

Nov 30

AAPT Selects Ciena for Nationwide Business Ethernet Services Build

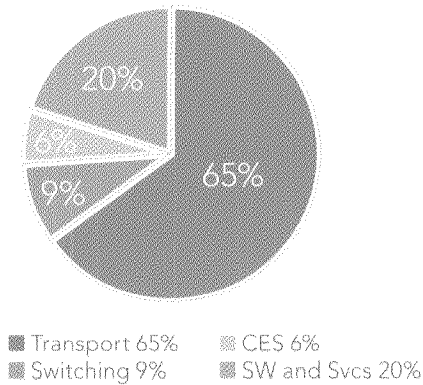
Jun 20

Comcast Deploys Ciena for Metro Ethernet Services

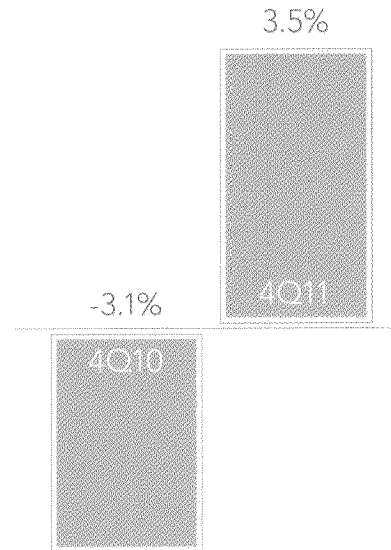
Dec 1

BT Expands 21CN Using Ciena's Next Generation of High Bandwidth Optical DWDM Technology

Strong Product Mix*

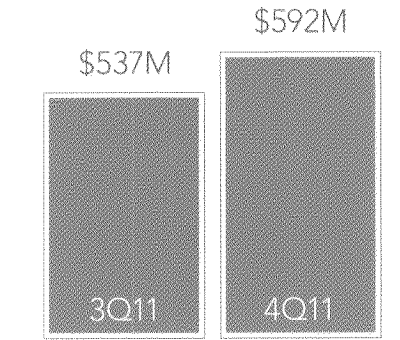


Operating Profit*



*As adjusted

Cash Position



at work. Growth in data, video, mobility, and virtualization continued to be healthy demand drivers for bandwidth creation, automation and management in 2011, and we also are now seeing a ramp in machine-to-machine (M2M) communications driven by smart consumer devices and cloud computing applications, representing new opportunities for Ciena.

These trends are intersecting at the right time for Ciena as customers look to leverage new technologies and modernize their networks. In 2011, we took advantage of being the only supplier with a viable commercial solution for 100G networking and began deploying in earnest. As bandwidth grows rapidly, customers increasingly are adopting OTN architectures as a means of automating the provisioning and management of that bandwidth, and only Ciena delivers an OTN switching solution that delivers this capability with an intelligent control plane that offers more than 10 years of development and market validation. Ciena also provides the most automated on and off ramps to these ultra high-bandwidth networks through our Carrier Ethernet solutions. And, as our customers look to their suppliers to deliver more, Ciena offers unified management software to simplify the operations of these integrated networks.

Our customers have noticed our progress. The recent global survey by Infonetics, a research firm focused on our industry, shows that Ciena is considered by global service providers to be the leader in multiple categories. Of note, Ciena is #1 in customer awareness; #1 in technology; #1 in R&D and roadmap; #1 in overall transport and switching; and #1 in packet optical transport.

This is great momentum. Looking ahead to 2012, we intend to translate momentum into greater operating leverage and profitability by further developing our highly differentiated market position as the network specialist. This includes expanding Ciena's go-to-market approach, evolving our research and development focus, and intensifying our efforts on operational efficiencies.

As the network specialist, Ciena has carved out a unique role for ourselves in the networking marketplace. Our customer engagement methodology is to develop high-touch relationships that are focused first on understanding each customer's specific business objectives, and then on creating solutions that tailor the right technologies to enable the network to operate as a strategic business asset. It is an approach based on mutual trust. In 2012, we will apply this approach to more verticals, more applications, and more geographies. Our direct field

Our specialist strategy is earning us the trust necessary to closely partner with customers, delivering these technologies as we out-innovate our competition. This unique capability gives us the platform to drive the next phase of growth and profitability.

organization will be complemented with strategic partnerships that are structured to efficiently achieve our growth objectives in specific markets. In addition, we are enhancing our services organization with intensified focus on design, development and delivery of new advanced professional services—tapping the distinct insights we have gained from years of running a collaborative customer engagement model.

Another distinguishing aspect of our network specialist role is our focus on strategic, next-generation technologies. In 2012, we will work to more tightly align our R&D investment strategy to ensure that these technologies are ideal not only for our traditional accounts, but also for more growth applications and customer types beyond our service provider base of customers, including large enterprises and government agencies, cable and multiservice operators, submarine networks, Internet content providers and delivery networks, cloud-based services, and business Ethernet services.

We believe that we have an opportunity in 2012 to begin to deliver against another expectation as the network specialist—world-class business operations and efficiency. Our principal aim during the MEN integration was to minimize disruptions to customers while combining the companies and not add risk by attempting to re-engineer operations at the same time. Thanks to the hard work of our employees, the integration went exceedingly well, and to the great satisfaction of our customers. While deliberate in this approach to ensure a timely and successful integration, we now have many opportunities to fine-tune our operations.

Particular focus will be given to Ciena's supply chain, where we intend to streamline the structure and reduce costs. We also will focus on redesigning and automating some of our business processes, systems, and resources. We believe these efforts, along with revenue growth and design-based cost reductions in our new products, will result in more operating leverage in fiscal 2012.

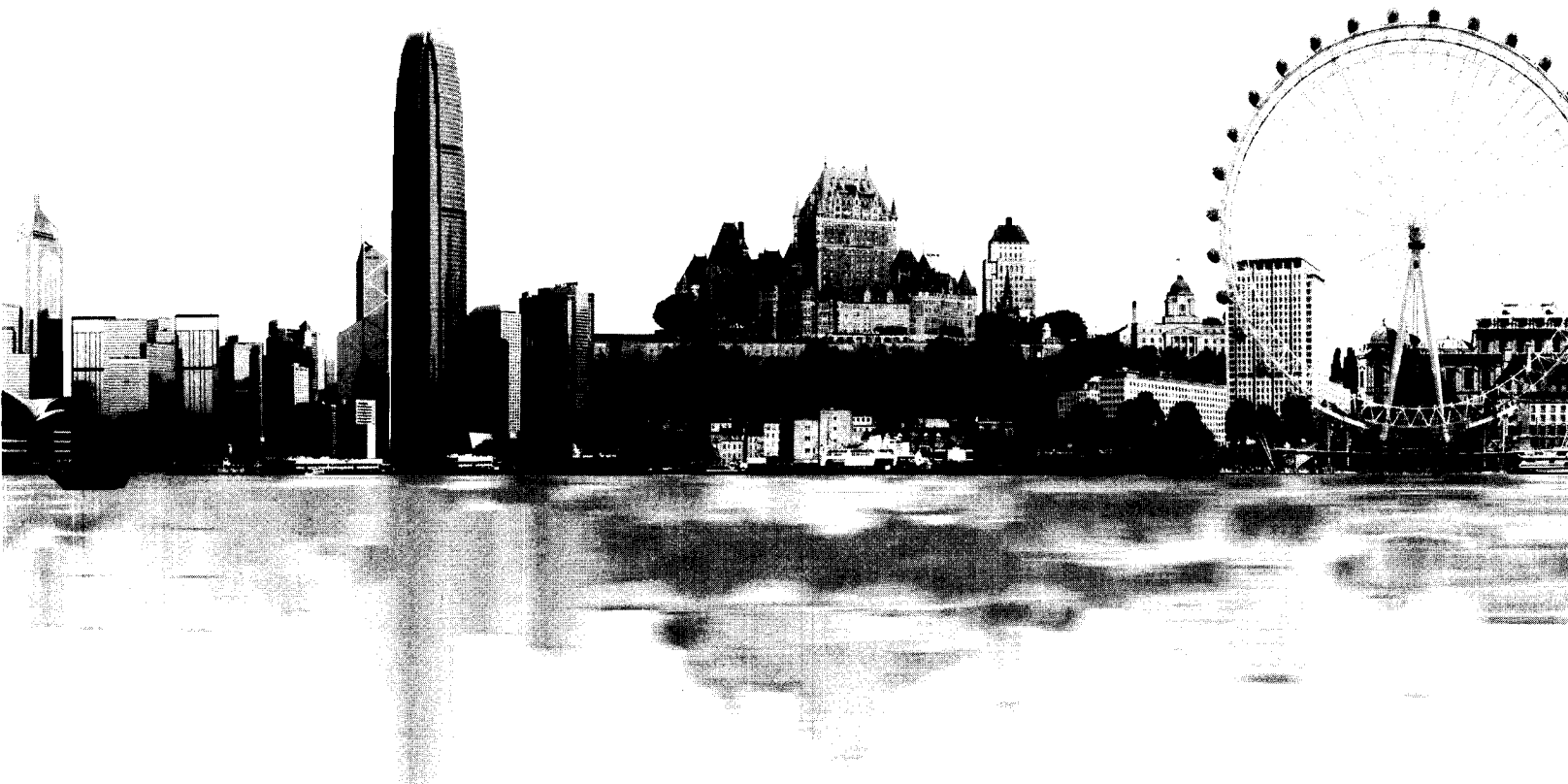
We are very proud of the progress we made in 2011, and we expect 2012 to be another good year. We believe Ciena is very well positioned to lead our customers through the network modernization movement. This critical evolution requires the convergence of key technologies over the next several years, enabling customers to apply intelligence to their networks and manage an increasing amount of diverse traffic. Our specialist strategy is earning us the trust necessary to closely partner with customers, delivering these technologies as we out-innovate our competition. This unique capability gives us the platform to drive the next phase of growth and profitability. The early results of our efforts are encouraging, and as we execute on our 2012 initiatives we intend to expand our market, technology and thought leadership, setting our sights on emerging opportunities. My thanks to our employees, customers, partners and stakeholders as we continue to grow and become an even more valuable player in our space.



Gary B. Smith
President and Chief Executive Officer

10-K

ciena corporation



UNITED STATES STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended October 31, 2011

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____

Commission file number 0-21969

Ciena Corporation
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
Incorporation or organization)

1201 Winterson Road, Linthicum, MD

(Address of principal executive offices)

23-2725311

(I.R.S. Employer
Identification No.)

21090-2205

(Zip Code)

(410) 865-8500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class

Common Stock, \$0.01 par value

Name of Each Exchange on Which Registered

The NASDAQ Stock Market

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☒ NO ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.4-5 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES ☒ NO ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Act. (Check one):

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) YES ☐ NO ☒

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant was approximately \$2.1 billion based on the closing price of the Common Stock on the NASDAQ Global Select Market on April 29, 2011.

The number of shares of Registrant's Common Stock outstanding as of December 15, 2011 was 97,442,608.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of the Form 10-K incorporates by reference certain portions of the Registrant's definitive proxy statement for its 2012 Annual Meeting of Stockholders to be filed with the Commission not later than 120 days after the end of the fiscal year covered by this report.

CIENA CORPORATION
ANNUAL REPORT ON FORM 10-K
FOR FISCAL YEAR ENDED OCTOBER 31, 2011

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PART I

The information in this annual report contains certain forward-looking statements, including statements related to our business prospects and strategies, the markets for our products and services, and trends in our business and markets that involve risks and uncertainties. Our actual results may differ materially from the results discussed in these forward-looking statements. Factors that might cause such a difference include those discussed in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and elsewhere in this annual report.

Item 1. Business

Overview

We are a provider of equipment, software and service solutions that support the transport, switching, aggregation and management of voice, video and data traffic on communications networks. Our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products are deployed and used, individually or as part of an integrated solution, in communications networks operated by communications service providers, cable operators, governments, enterprises and other network operators around the globe.

We are a network specialist focused on the modernization and transition of disparate, legacy network infrastructures to converged, next-generation architectures, optimized to handle a broader mix of high-bandwidth communications services. Our product portfolio consists of our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products that enable network operators to scale capacity and increase transmission speeds, transport and efficiently allocate network traffic, and deliver communication services to business and consumer end users. Our network solutions also include our Ciena One software suite for unified network management and network planning and design, as well as a broad offering of advanced network consulting, design, implementation and support services.

Our customers face a challenging and rapidly changing environment that requires their networks be robust enough to address increasing capacity needs and flexible enough to quickly adapt to emerging applications and evolving consumer and business use of communications services. Our solutions seek to enable software-defined, automated, next-generation networks that better address the business challenges, infrastructure requirements and service delivery needs of our customers. By improving network productivity and automation, reducing network costs and enabling rapid deployment of differentiated service offerings, our communications networking solutions create business and operational value for our customers.

Segment Data and Certain Financial Information

We currently organize our operations into four separate operating segments: "Packet-Optical Transport," "Packet-Optical Switching," "Carrier Ethernet Solutions," and "Software and Services." The matters discussed in this "Business" section should be read in conjunction with the Consolidated Financial Statements found under Item 8 of Part II of this annual report, which include additional financial information about our operating segments, total assets, revenue, measures of profit and loss, and financial information about geographic areas and customers representing greater than 10% of revenue.

On March 19, 2010, we completed our acquisition of substantially all of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks business (the "MEN Business"). See Note 2 to the Consolidated Financial Statements found under Item 8 of Part II of this annual report for additional information relating to this transaction (the "MEN Acquisition") and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this annual report, for additional information describing its effect on our business, results of operations and financial position.

We generated revenue of \$1.7 billion in fiscal 2011, as compared to \$1.2 billion in fiscal 2010. Annual revenue growth in fiscal 2011 reflects, in part, the inclusion of the operations of the MEN Business for a full fiscal year in 2011, as compared to the period after March 19, 2010 in fiscal 2010. For more information regarding our results of operations, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this annual report.

Corporate Information and Access to SEC Reports

We were incorporated in Delaware in November 1992 and completed our initial public offering on February 7, 1997. Our principal executive offices are located at 1201 Winterson Road, Linthicum, Maryland 21090. Our telephone number is (410) 865-8500, and our web site address is www.ciena.com. We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, available free of charge on the "Investors" page of our web site as soon as reasonably practicable after we file these reports with the Securities and Exchange Commission (SEC).

We routinely post the reports above, recent news and announcements, financial results and other important information about our business on our website at www.ciena.com. Information contained on our web site is not a part of this annual report.

Industry Background

The markets in which we sell our communications networking solutions have been subject to dynamic changes in recent years, including significant growth in network traffic, expanded service offerings, and evolving technologies and end user demands. These conditions have created market opportunities and business challenges and changed competitive landscapes. Existing and emerging network operators are competing to distinguish their service offerings and add revenue generating services while seeking to manage capital expenditures and operate their businesses profitably. We believe these market dynamics will cause network operators to adopt communications infrastructures that are increasingly more automated, robust and adaptable.

Network Traffic Growth Driving Increased Capacity Requirements Transmission Speeds

Optical networks, which carry voice, video and data traffic using multiple wavelengths of light across fiber optic cables, have experienced a multi-year period of strong traffic growth, and continued growth is projected by industry analysts for the foreseeable future. Increasing network traffic is being driven by growing use of and reliance upon a broad range of communications services by consumer and business end users, as well as the expansion of bandwidth intensive, wireline and wireless service offerings. Business customers seeking to improve automation, efficiency and productivity are increasingly dependent upon bandwidth-intensive, enterprise-oriented communications services that facilitate global operations, employee mobility and seamless access to critical business applications and data. At the same time, an increasing portion of network traffic is being driven by growth of consumer-oriented applications and consumer adoption of broadband technologies. These include peer-to-peer Internet applications, residential video services, online gaming, and music downloads and consumer-oriented cloud-based services. Expanding mobile applications, including Internet, video and data services from the proliferation of smartphones, tablets and other devices with wireless access, are further increasing network traffic. In addition, technology trends such as IT virtualization, cloud computing and machine-to-machine connections are placing new capacity and service requirements on networks. This traffic growth requires that network operators add capacity or transition to higher capacity networks with increased transmission speeds.

Multiservice Traffic and Transition to Flexible Network Architectures

We expect that the broadening mix of high-bandwidth, data and video communications services, together with growing mobility and expanding wireless applications, will require upgrades to existing network infrastructure, including mobile backhaul and traditional wireline networks. This mix of high-bandwidth and latency-sensitive data traffic, and an increased focus on controlling network costs, are driving a transition from multiple, disparate SONET/SDH-based networks to more efficient, converged, multi-purpose optical transport network (OTN)/Ethernet packet-based network architectures. The industry has seen network technology transitions like this in the past. These upgrade and investment cycles tend to happen over multi-year periods. For instance, from the mid 1980s to the mid 1990s, service providers focused network upgrades on the transition required to digitize voice traffic. From the mid 1990s to the mid 2000s, service providers focused network upgrades on the transition to SONET/SDH networks designed to reliably handle substantially more network traffic. We believe that the industry is currently in the early stages of network transition to flexible, multi-purpose OTN/Ethernet packet-based network architectures that more efficiently handle a growing mix of high-bandwidth communications services and a greater concentration of data traffic.

Emerging Drivers for Network Modernization

Enterprise and consumer end users used to perceive value simply in their network connectivity. Today, however, end users are increasingly focused upon the value they receive from, and have increased expectations of, the specific services or applications they utilize and the performance level delivered by the underlying network. As a result, network operators need to create, market, and sell profitable services as opposed to simply selling connectivity. This shift fundamentally changes how communications networks are designed and managed. Some of the areas that network operators are pursuing to better compete and drive end user value include:

- *IT Virtualization.* IT Virtualization moves a physical resource from a user's desktop into the network, thereby making more efficient use of information technology resources. This approach has many appealing attributes such as lowering barriers of entry into new markets, and adding flexibility to scale certain aspects of a business faster and with less expense.

- *“Cloud” Services.* Cloud services are characterized by the sharing of computing, storage and network resources to improve economics through higher utilization efficiencies. IT and network service providers are centralizing these resources in order to offer usage-based and metered services that are hosted remotely across a network. Smaller enterprises and consumers can subscribe to an expanding range of cloud services to replace local computing and storage requirements. Larger enterprises and data center operators may use private clouds to consolidate their own resources and public clouds to accommodate peak demand situations, often in combination.
- *Mobility.* The emergence of smart mobile devices that deliver integrated voice, audio, photo, video, email and mobile Internet capabilities, like Apple's iPhone™ and iPad™, and Android™-based smart phones and tablets, are rapidly changing the service type and magnitude of data traffic carried by wireless networks. The increase in availability and improved ease of use of web-based applications from mobile devices expands the reach of virtualized services beyond a wireline connection. For instance, consumer-driven video and gaming are being virtualized, allowing broad access to these applications, regardless of the device or the network used.
- *Machine-to-Machine (M2M) Applications.* In the past, communications services largely related to the connection of people-to-people or people with content. Today, the number of networked connections between devices and servers (machines) is growing rapidly. These connections allow the sharing of data that can be monitored and analyzed by applications residing on those devices in order to provide value-added services to users. Because of the growing number and types of devices that can access network connectivity -- especially via wireless connection -- this trend is expanding from one-to-one M2M connection to entire networks of many-to-many M2M connections. We expect service traffic relating to the interconnection of machines or devices to grow as Internet and cloud content delivery, smartgrid applications, health care and safety monitoring, resource/inventory management, home entertainment, consumer appliances and other mobile data applications become more widely adopted.

Market Conditions and Effect on Network Investment

The sustained period of macroeconomic weakness and volatility in the global economy and in capital markets in recent years has resulted in heightened uncertainty and cautious customer behavior and capital expenditures in our industry and markets. These dynamics have caused increased customer scrutiny, and more rigid prioritization, of network investment, resulting in protracted sales cycles, lengthier network deployments, revenue recognition delays and extended collection cycles, particularly for international network projects. Our customers seek to create and rapidly deliver new, robust service offerings and dedicated communications operating at increasing speeds to differentiate from competitors and grow their business. At the same time, they are increasingly seeking ways to optimize their network operating and capital costs. We believe that these dynamics, together with multiservice capacity growth, are driving a shift in network priorities and spending toward high-capacity, next-generation network architectures. By utilizing scalable, adaptable networks that offer greater flexibility for delivery of new services, and are also less complex and expensive to operate, network operators can derive increased value from their network investments.

Strategy

During the second half of fiscal 2010 and most of fiscal 2011, we were focused to a significant extent on the critical integration activities relating to the MEN Acquisition and our combined operating milestones. Having successfully completed these activities, we are now entering the next phase of our corporate strategy, centered around the targeted growth and optimization of our business in order to achieve improved operating leverage and deliver the full value of the MEN Acquisition.

The underpinning of this corporate strategy lies in our positioning and approach as the network specialist. This approach is rooted in continued investment in our solutions and focused innovation in next-generation technologies that target high-growth applications and markets and the network and business priorities of our customers. This approach also seeks to leverage the insight we provide customers from our intimate and collaborative engagement model, based on outstanding people, trust and network experience. Key components of this corporate strategy are set forth below.

Evolve Go-to-Market Model. We seek to evolve our go-to-market model, both from a coverage and an engagement perspective.

Coverage. Our coverage model is focused on penetrating high-growth geographic markets, selling into emerging customer segments and addressing additional network applications with our solutions. We seek to enhance our brand internationally, expand our geographic reach and capture market share in international markets, including Brazil, the Middle East, Russia, Japan and India. We intend to pursue opportunities to diversify our customer base and seek to grow

our sales to wireless providers, cable and multiservice operators, enterprises, government agencies, and research and educational institutions. We are also targeting network operators emerging as a result of network modernization drivers and the introduction and adoption of new communication services and applications. In particular, we seek to sell our solutions to support additional network applications, including in submarine networks, Internet content providers, cloud-based services, business Ethernet services and mobile backhaul. We intend to pursue sales initiatives and strategic channel opportunities, including relationships with resellers, service providers, other vendors and integrators, to complement our direct sales force and more deeply penetrate these geographic markets, customers and applications.

Engagement. Our strategy is to leverage our close relationship with customers in the design, development, implementation and support of their networks and to promote a close alignment of our solutions with customer network priorities. This engagement model is a key differentiator for our business and provides us with unique insight into the business and network needs of our customers. We seek to offer an expanded portfolio of advanced professional services that address the network modernization demands and business needs of our customers. We believe this services-oriented, solutions offering shifts our value proposition beyond the sale of our next-generation communications networking products and allows us to better participate in the evolution of our customers' networks. By understanding and addressing their network infrastructure needs, the competitive landscape, and the evolving markets in which our customers compete, we believe this customized solutions offering creates additional business and operational value for our customers, enabling them to better compete in a challenging environment.

Alignment of Research and Development Investment with Growth Opportunities. We seek to ensure that our product development initiatives and investments are closely aligned with current and future market growth opportunities. As end-user needs evolve, opportunities are emerging that allow us to expand our role in our customers' networks. We intend to apply our "intelligent infrastructure" approach -- a cost-optimized network platform that enables virtualization, mobility, and greater scale, bandwidth management and automation -- to high-growth markets, applications and customer segments. These include enterprise-oriented applications, optimized submarine cable solutions, Internet content delivery, cloud service infrastructure and packet-based infrastructure solutions for next-generation, high-capacity networks. Through a combination of technology innovation, as well as cross-selling and other sales initiatives, we seek to drive additional business from these growth applications and customer segments.

Promote our network approach and vision. The services and applications running on communications networks are requiring that more of the traffic on these networks be packet-oriented. The traditional approach to this problem has been to add IP routing capability at various points in the network. As capacity needs grow, this approach becomes unnecessarily complex and costly. We reduce the cost and complexity of growing these networks by bringing together the reliability and capacity of optical networking with the flexibility and economics of Ethernet, unified by our integrated network management software -- something we call "converged optical Ethernet." Converged optical Ethernet creates a network that is resilient, reconfigurable and automated. We believe that these attributes are essential to supporting next-generation services and applications at the performance level required by end users. We intend to promote the scalability, flexibility and cost effectiveness advantages of our implementation of next-generation network architectures and see opportunities in providing a portfolio of carrier-class solutions that facilitate the transition to converged optical Ethernet networks.

Business optimization to yield operating leverage. We seek to improve the operational efficiencies in our business, and thereby gain additional operating leverage in order to achieve our target operating model goals. We are focused on the transformation and operational redesign of certain business processes, systems, infrastructure and resources. These initiatives include additional investments and further reengineering and automation of certain key business processes, including the engagement of strategic partners or resources to assist with select business functions. In addition, we are focused on optimizing our supply chain structure in order to reduce our costs and overhead. These initiatives include the rationalization and consolidation of third party manufacturers, distribution sites and logistics providers, the pursuit of a direct order fulfillment model for additional products, and the consideration of select vertical integration within our supply chain. We seek to leverage these and other longer-term opportunities to promote and ensure the profitable growth of our business.

Customers and Markets

Our customer base, and the geographic markets and customer segments into which we sell our products and services, have expanded in recent years. As a result of industry dynamics above, additional network operators supporting new communications services and applications continue to emerge. The network infrastructure needs of our customers vary, depending upon their size, location, the nature of their end users and the services that they deliver and support. We sell our product and service solutions through our direct sales force and third party channel partners to end user network operators in the following customer segments:

Communications Service Providers

Our service provider customers include regional, national and international wireline and wireless carriers, as well as service provider consortia offering services over submarine networks. Our customers include AT&T, Bell Canada, BT, Cable & Wireless, CenturyLink, France Telecom, Korea Telecom, Sprint, Tata Communications, Telefonica, Telmex, Telus, Verizon and XO Communications. Communications service providers are our historical customer base and continue to represent a significant majority of our revenue. We provide service providers with products from the network core to its edge where end users gain access. Our service provider solutions address growing bandwidth demand from multiservice traffic growth and support key service provider offerings, including carrier-managed services, wide area network (WAN) consolidation, inter-site connectivity, storage extension, business continuity and Ethernet services.

Cable Operators

Our customers include leading cable and multiservice operators in the U.S. and internationally. These customers include Cogeco, Comcast, Cox, RCN, Rogers and Time Warner. Our cable and multiservice operator customers rely upon us for carrier-grade, converged optical Ethernet transport and switching products to support enterprise-oriented services. Our platforms allow cable operators to integrate voice, video and data applications over a converged infrastructure and scale their networking infrastructure to keep ahead of the bandwidth and application demands of their subscribers. Our products support key cable applications including business Ethernet services, wireless backhaul, broadcast and digital video, voice over IP, and video on demand.

Enterprise

Our enterprise customers include large, multi-site commercial organizations, including participants in the financial, health care, transportation, utilities and retail industries. Our end users and customers include the Australian Stock Exchange, Bank of America, Barclays, Gannett, Goldman Sachs, Hong Kong Stock Exchange, Iowa Health System, Korea Exchange, Nielsen Media Research, NYSE Euronext, Saint Francis Hospital in Hartford, Swiss Broadcasting Corporation and UC Health in Cincinnati. Our solutions enable enterprises to achieve operational improvements, increased automation and information technology cost reductions. Our products enable inter-site connectivity between data centers, sales offices, manufacturing plants, retail stores and research and development centers, using an owned or leased private fiber network or a carrier-managed service. Our products facilitate key enterprise applications including IT virtualization, data, voice and video transport, business Ethernet services, storage extension, business continuity, online collaboration, video conferencing, cloud computing, low latency networking and WAN encryption. Our products also enable our enterprise customers to prevent unexpected network downtime and ensure the safety, security and availability of their data.

Government, Research and Education

Our government customers include federal and state agencies in the U.S. as well as international government entities. Our end users and customers include domestic and international research and education institutions, including California Institute of Technology, CANARIE, Internet2, JANET, MAGPI, MIT, Northwestern University, RENATER, SURFnet, Swedish University Network (SUNET) and VERNET. Our government and research and education customers seek to take advantage of technology innovation, improve their information infrastructure, and facilitate increased collaboration. Our solutions feature ultra-high capacity, reconfigurability and service flexibility to meet the requirements of supercomputing systems. Our solutions offering enables these customers to improve network performance, capacity, security, reliability and flexibility. We collaborate with leading institutions to provide government and research and education communities with optimized networks that minimize cost and complexity, through initiatives that support intelligent control plane technologies, interoperability and scalability.

Products and Services

Our product portfolio consists of our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products. Through these products, our unified network management software and our advanced and support services offerings, we offer customers a comprehensive solution to address their communications network priorities.

Packet-Optical Transport

Our Packet-Optical Transport platforms include flexible, scalable wavelength division multiplexing (WDM) solutions that add capacity to core, regional and metro networks and enable cost-effective and efficient transport of voice, video and data traffic. We offer scalable Packet-Optical Transport platforms, including several chassis sizes and a comprehensive set of line cards, that can be utilized from the customer premises, where space and power are critical, to the metropolitan/regional core,

where the need for high capacity and carrier-class performance are essential. By automating optical infrastructures, our Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Our Packet-Optical Transport portfolio includes the following products:

- 6500 Packet-Optical Platform;
- 4200® Advanced Services Platform;
- 5100/5200 Advanced Services Platform;
- Corestream® Agility Optical Transport System;
- Common Photonic Layer (CPL); and
- 6100 Multiservice Optical Platform.

Our Packet-Optical Transport portfolio, including our 6500 Packet-Optical Platform and 4200 Advanced Services Platform, features coherent, 40G and 100G optical transport technology and our WaveLogic Coherent Optical Processors. These proprietary silicon chips facilitate deployment of our transport technology over existing customer fiber plant (terrestrial and submarine), enable our optical transmission systems to scale capacity to 40G and 100G, and yield additional economic benefits through the reduction or elimination of network equipment, such as amplifiers, regenerators and dispersion compensating devices. Our Packet-Optical Transport solutions also include legacy SONET/SDH products and legacy data networking products, as well as certain enterprise-oriented transport solutions that support storage and local area network (LAN) extension, interconnection of data centers, and virtual private networks.

Packet-Optical Switching

Our Packet-Optical Switching family of products provides time division multiplexing (TDM) switching and packet switching capability to allocate network capacity and enable service delivery. Our principal Packet-Optical Switching products are our CoreDirector® Multiservice Optical Switch, our 5430 Reconfigurable Switching System and our OTN configuration for the 5410 Reconfigurable Switching System. This product segment includes multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both core and metro segments of communications networks and support key managed services, including Ethernet/TDM Private Line, Triple Play and IP services. Our Packet-Optical Switching solutions include a family of multi-terabit reconfigurable switching systems that utilize intelligent mesh networking to provide resiliency and feature an integrated optical control plane to automate the provisioning and bandwidth control of high-capacity services. Our Packet-Optical Switching systems flexibly support a mix of Carrier Ethernet/MPLS, OTN, WDM, and SONET/SDH switching to facilitate the transition to a service-enabling infrastructure.

Carrier Ethernet Solutions

Our Carrier Ethernet Solutions allow customers to utilize the automation and capacity created by our Packet-Optical Transport products in core and metro networks and deliver new, revenue-generating services to consumers and enterprises. These products have applications from the edge of metro and core networks, where they aggregate traffic, to the access tiers of networks where they can be deployed to support wireless backhaul infrastructures and deliver business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features.

Our Carrier Ethernet Solutions offering primarily consists of our 3000 family of service delivery switches and service aggregation switches, our 5000 series of service aggregation switches, and our Carrier Ethernet configuration for the 5410 Service Aggregation Switch. Our service delivery and packet aggregation switches provide True Carrier Ethernet, a more reliable and feature rich type of Ethernet that can support a wider variety of services. Service delivery products are often used at customer premises locations while aggregation platforms are used to combine services to improve network resource utilization. This segment also includes our legacy broadband products, including our CNX-5 Broadband DSL System (CNX-5), that transitions legacy voice networks to support IP-based telephony, video services and DSL.

Unified Software and Service Management Tools

Our integrated software offering, the Ciena One software suite, includes OneControl, our network management software that unifies our product portfolio and provides the automation and management features that enable efficient service delivery. Our network management tools offer a comprehensive set of functions, from monitoring network health and provisioning the network to full service level management across a variety of network layers and domains. Our Ciena One software suite is a robust, service aware framework that improves network utilization and availability, while delivering enhanced performance monitoring and reliability. By increasing network automation, minimizing network downtime and monitoring network

performance and service metrics, our software tools enable customers to improve cost effectiveness, while increasing the performance and functionality of their network operations. This software suite also includes a number of planning tools, including Ciena OnePlanner, which helps network operators better utilize their networks. In addition to Ciena One, our software offering includes our ON-Center® Network & Service Management Suite, and the OMEA and Preside platforms from the MEN Business.

Advanced and Support Services

To complement our product portfolio, we offer a broad range of advanced consulting and support services that help our customers design, optimize, deploy, manage and maintain their communications networks. We believe that our broad set of service offerings is an important component of our network specialist approach and a significant differentiator with customers. We believe that our advanced services offering and our close collaborative engagement with customers provide us with valued insight into network and business challenges faced by our customers. Our advanced and support services offering enables our network specialist approach in the assessment, planning, deployment, and support of customer network architectures. We believe that customers place significant value on the strategic, consultative engagements afforded by our advanced and support services, and our ability to partner with them through services-oriented solutions that address their network and business needs.

Our services and support portfolio includes the following offerings:

- Network analysis, planning and design;
- Network optimization and tuning;
- Project management, including staging, site preparation and installation activities;
- Deployment services, including turnkey installation and turn-up and test services; and
- Maintenance and support services, including:
 - helpdesk, technical assistance and training;
 - spares and logistics management;
 - engineering dispatch and on-site professional services;
 - equipment repair and replacement; and
 - software maintenance and updates.

We provide these services through our internal resources as well as through qualified, third party service partners.

Product Development

Our industry is subject to rapid technological developments, evolving service delivery requirements, standards and protocols, and shifts in customer and end user network demand. To remain competitive, we must continually enhance existing product platforms by adding new features and functionality and introducing new product platforms that address multiservice traffic growth, enable new service offerings and facilitate the transition to converged optical Ethernet networking. Our research and development strategy has been to pursue technology convergence, which allows us to consolidate multiple features and functionalities found on different Ciena product platforms onto a single platform. We believe this approach creates more robust and cost-effective network solutions for our customers. In addition, our current development investments are focused upon:

- Extending our Packet-Optical Transport leadership in 40G and 100G long-haul transport, and making metropolitan network applications more cost effective for network operators, through continued development of our coherent transmission technology to further improve network capacity, transmission speed, flexibility, performance, spectral efficiency and reach;
- Enhancing our data-optimized, Packet-Optical Switching solutions to enable an end-to-end Optical Transport Network (OTN) architecture that offers improved cost per bit, flexibility and reliability;
- Expanding our Carrier Ethernet Solutions portfolio, including high-capacity Ethernet metro aggregation switches for mobile backhaul and business Ethernet services; and
- Interoperability and enhancing our control plane and integrated network management software platform to enable service level management across our solutions.

Our product development initiatives also include design and development work intended to address growing opportunities, such as metropolitan network applications, enterprise networking, cloud infrastructure and packet-based infrastructure solutions for next-generation, high-capacity networks. Our research and development efforts are also geared toward engineering changes intended to drive cost reductions in the manufacture of our products.

To ensure that our product development investments and solutions offering are closely aligned with market demand, we

continually seek input from customers and promote collaboration among our product development, marketing and global field organizations. In some cases, we work with third parties pursuant to technology licenses, original equipment manufacturer (OEM) arrangements and other strategic technology relationships or investments, to develop new components or products, modify existing platforms or offer complementary technology to our customers. In addition, we participate in industry and standards organizations, where appropriate, and incorporate information from these affiliations throughout the product development process.

We regularly review our existing product offerings and prospective development projects to determine their fit within our portfolio and broader corporate strategy. We assess the market demand, technology evolution, prospective return on investment and growth opportunities, as well as the costs and resources necessary to develop and support these products. In recent years, our strategy has been to pursue technology and product convergence that allows us to consolidate multiple technologies and functionalities on a single platform, or to control and manage multiple elements throughout the network from a uniform management system, ultimately creating more robust, integrated and cost-effective network tools. We have also shifted our strategic development approach from delivering point products to providing a focused combination of networking equipment, software and service solutions that address the business and network needs of our customers.

Within our global products group, we maintain a team of skilled engineers with extensive experience in the areas of photonics, packet and circuit switching, network system design, embedded operating system and network management software. Our research and development expense was \$190.3 million, \$327.6 million and \$379.9 million, for fiscal 2009, 2010 and 2011, respectively. The increased expense in fiscal 2010 and 2011 reflects the timing of the MEN Acquisition in the second quarter of fiscal 2010, including the related additions to our product portfolio, expanded development initiatives and increased engineering headcount and overhead. For more information regarding our research and development expense, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of Part II of this report.

Sales and Marketing

We sell our communications networking solutions through our direct sales resources as well as through strategic channel relationships. In addition to securing new customers in growth geographies and customer market segments, our sales strategy has focused on building long-term, consultative relationships with existing customers. We believe this approach promotes our network specialist approach and helps ensure the alignment of our expertise with the business and network requirements of our customers. We believe this approach also provides opportunities to participate in future projects relating to the transition or expansion of existing network infrastructures and to cross-sell solutions across our portfolio.

Within our global field operations, we maintain a direct sales presence that is organized geographically around the following markets: (i) U.S. and Canada; (ii) Caribbean and Latin America; (iii) Europe, Middle East and Africa; and (iv) Asia-Pacific. These regions include sales personnel that focus on one or more of the following customer segments: communications service providers including wireless providers, cable and multiservice operators, enterprise customers and government, research and education. Within each geographic area, we maintain regional, country and/or customer-specific teams, including sales management, account salespersons, systems engineers and strategic marketing, services and commercial management personnel, who ensure we operate closely with and provide a high level of support to our customers. We also maintain global sales teams that focus on submarine network opportunities and emerging customer segments including Internet content and cloud infrastructure providers.

We also maintain a global channel program that works with resellers, systems integrators, service providers, and other third party distributors who market and sell our products and services. Our third party channel sales and other distribution arrangements enable us to leverage our direct sales resources and reach additional geographic regions and customer segments. We intend to pursue and foster a small number of strategic channel relationships in an effort to enable us to sell our products as a complement to the broader offering of these vendors or integrators, including in particular, in support of enterprise-oriented applications. We also see opportunities to leverage these strategic channel relationships to address additional customer segments, emerging applications for our solutions and growth geographies. Our use of channel partners has been a key component in our sales to government, research and education and enterprise customers. We believe this strategy and our use of third party channels affords us expanded market opportunities and reduces the financial and operational risk of entering these additional markets.

To support our sales efforts, we engage in marketing activities intended to position and promote both our brand and our product, software and service offerings. Our marketing team supports sales efforts through direct customer interaction, industry events, public relations, industry analysts, social media, tradeshow, our website and other marketing channels for our customers and channel partners.

Operations and Supply Chain Management

Operations personnel within our global products group manage our relationships with our third party manufacturers and manage our supply chain. In addition, this team also addresses component procurement and sourcing, product testing and quality, and logistics relating to our sales, support and professional services, and distribution efforts.

We utilize a global sourcing strategy that emphasizes procurement of materials in lower cost regions. We rely upon third party manufacturers, with facilities in Canada, China, Mexico, Thailand and the United States, to perform nearly all of the manufacturing of our products. As a result, we are exposed to risks associated with the businesses of these third parties and the locations where their manufacturing occurs. These activities can include design and prototype development, component sourcing, full production, final assembly, testing and customer order fulfillment. We utilize a direct order fulfillment model for certain products, which allows us to rely on our third party manufacturers to perform final system integration and testing prior to shipment of products from their facilities directly to our customers. For certain products, we continue to perform a portion of the module assembly, software application, final system integration and testing internally. We believe that our sourcing and manufacturing strategy allows us to conserve capital, lower costs of product sales, adjust quickly to changes in market demand, and operate without dedicating significant resources to manufacturing-related plant and equipment. As part of our effort to optimize our operations, we continue to focus on driving cost reductions through sourcing and engineering efforts, rationalizing our supply chain and consolidating third party contract manufacturers, distribution sites and service logistics partners.

Our manufacturers procure components necessary for assembly and manufacture of our products based on our specifications, approved vendor lists, bill of materials and testing and quality standards. Our manufacturers' activity is based on rolling forecasts that we provide to them to estimate demand for our products. This build-to-forecast purchase model exposes us to the risk that our customers will not order those products for which we have forecast sales, or will purchase less than we have forecast. As a result, we incur carrying charges or obsolete material charges for components purchased by our manufacturers. We work closely with our manufacturers to manage material, quality, cost and delivery times, and we continually evaluate their services to ensure performance on a reliable and cost-effective basis.

Shortages in product components have occurred in the past and remain possible. Our products include some components that are proprietary in nature, only available from one or a small number of suppliers, or manufactured by sole or limited sources responsible for production. Significant time would be required to establish relationships with alternate suppliers or providers of critical components. We do not have long-term contracts with any supplier or manufacturer that guarantees supply of components or manufacturing services. If component supplies become limited, production at a manufacturer is disrupted, or if we experience difficulty in our relationship with a key supplier or manufacturer, we may encounter manufacturing delays that could adversely affect our business.

Backlog

Generally, we make sales pursuant to purchase orders issued under framework agreements that govern the general commercial terms and conditions of the sale of our products and services. These agreements do not obligate customers to purchase any minimum or guaranteed order quantities. Our backlog includes orders for products that have not been shipped and for services that have not yet been performed. In addition, backlog also includes orders relating to products that have been delivered and services that have been performed, but are awaiting customer acceptance under the applicable purchase terms. Generally, our customers may cancel or change their orders with limited advance notice, or they may decide not to accept these products and services, although this is infrequent. Orders in backlog may be fulfilled several quarters following receipt or may relate to multi-year support service obligations. As a result, backlog should not be viewed as an accurate indicator of future revenue in any particular period.

Our backlog increased from \$591.0 million as of October 31, 2010 to \$714.1 million as of October 31, 2011. Backlog includes product and service orders from commercial and government customers combined. Backlog at October 31, 2011 includes approximately \$83.5 million primarily related to orders for maintenance and support services that we do not reasonably expect to be filled within the next fiscal year. Our presentation of backlog may not be comparable with figures presented by other companies in our industry.

Seasonality

Like other companies in our industry, we have experienced quarterly fluctuations in customer activity due to seasonal considerations. We have experienced reductions in order volume for product sales toward the end of the calendar year, as the procurement and deployment cycles of some of our customers slow, and again early in the calendar year, as annual capital budgets of some of our customers are finalized. Given our October 31 fiscal year end, these seasonal influences have adversely

affected our order volume in our first fiscal quarter. Conversely, we have previously experienced increased services order flow late in the calendar year as maintenance and support service terms are renewed. While we have limited operating history from which to assess these seasonal effects since the completion of the MEN Acquisition, we believe that this seasonality in our order flows could result in somewhat weaker revenue results in the first half of our fiscal year, as compared to our revenue for the second half of our fiscal year. In addition, we have also experienced reductions in customer activity, particularly in Europe, during the late summer months which has resulted in reduced order activity during our fiscal third quarter, which ends on July 31 of each year. These seasonal effects do not apply consistently and do not always correlate to our financial results. Accordingly, they should not be considered a reliable indicator of our future revenue or results of operations.

Competition

Competition among communications network solution vendors remains intense. The markets in which we compete are characterized by rapidly advancing and converging technologies, introduction of new network solutions and selling efforts to displace incumbent vendors and secure market share. Successfully competing in these markets is based on any one or a combination of the following factors:

- product functionality, speed, capacity, scalability and performance;
- price and total cost of ownership;
- incumbency and existing business relationships;
- product development plans and the ability to meet customers' immediate and future network requirements;
- flexibility, including ease of integration, product interoperability and integrated management;
- manufacturing and lead-time capability; and
- services and support capabilities.

In this competitive environment, securing new opportunities, particularly in international markets, often requires that we agree to less favorable commercial terms or pricing, financial commitments requiring collateralized performance bonds or similar instruments that place cash resources at risk, and other contractual commitments that place a disproportionate allocation of risk upon the vendor. These terms can adversely affect our result of operations.

Competition for sales of communications networking solutions is dominated by a small number of very large, multi-national companies. Our competitors have included Alcatel-Lucent, Cisco, Ericsson, Fujitsu, Huawei, Juniper Networks, Nokia Siemens Networks, Tellabs and ZTE. Many of these competitors have substantially greater financial, operational and marketing resources than Ciena, significantly broader product offerings or more extensive customer bases. In recent years, mergers among some of our larger competitors have intensified these advantages. We expect the level of competition, particularly in North America, to continue and potentially increase, as Chinese equipment vendors seek to gain entry into the U.S. market, and other multinational competitors seek to retain incumbent positions and market share with large customers in the region.

We also compete with several smaller, but established, companies that offer one or more products that compete directly or indirectly with our offerings or whose products address specific niches within the markets and customer segments we address. These competitors include ADVA, BTI, Infinera and Transmode. In addition, there are a variety of earlier-stage companies with products targeted at specific segments of the communications networking market. These competitors often employ aggressive competitive and business tactics as they seek to gain entry to certain customers or markets. Due to these practices and the narrower focus of their development efforts, these competitors may be able to develop and introduce products more quickly, or offer commercial terms that are more attractive to customers.

Patents, Trademarks and Other Intellectual Property Rights

The success of our business and technology leadership are significantly dependent upon our proprietary and internally developed technology. We rely upon patents, copyrights, trademarks, and trade secret laws to establish and maintain proprietary rights in our technology. We maintain a patent incentive program that seeks to reward innovation and regularly file applications for patents and have a significant number of patents in the United States and other countries where we do business. As of December 1, 2011, we had received 1,302 U.S. patents and had pending 266 U.S. patent applications. We also have over 415 non-U.S. patents.

We also rely on non-disclosure agreements and other contracts and policies regarding confidentiality with employees, contractors and customers, to establish proprietary rights and protect trade secrets and confidential information. Our practice is to require employees and relevant consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements with us. These agreements acknowledge our ownership of intellectual property developed by the individual during the course of his or her work with us. The agreements also require that

these persons maintain the confidentiality of all proprietary information disclosed to them.

Enforcing proprietary rights, especially patents, can be costly and uncertain. Moreover, monitoring unauthorized use of our technology is difficult, and we cannot be certain that the steps that we are taking will detect or prevent unauthorized use. In recent years, we have filed suit to enforce our intellectual property rights. We have also been subject to several claims related to patent infringement, including by competitors and non-practicing entities or "patent trolls," and have been requested to honor contractual indemnity obligations relating to infringement claims made against our customers by third parties. Intellectual property infringement assertions could cause us to incur substantial costs, including legal fees in the defense of these actions. If we are not successful in defending these claims, our business would be adversely affected if we are required to enter into a license agreement requiring ongoing royalty payments, required to redesign our products, or prohibited from selling any infringing technology.

Our operating system, element and network management software and other products incorporate software and components under licenses from third parties. We may be required to license additional technology from third parties in order to develop new products or product enhancements. Failure to obtain or maintain such licenses or other rights could affect our development efforts, require us to re-engineer our products or obtain alternate technologies, which could harm our business, financial condition and operating results.

Among the patent and other third party intellectual property licenses to which we are a party, in connection with the MEN Acquisition, we obtained a non-exclusive license to use patents and other intellectual property controlled or exclusively owned by Nortel in connection with our manufacture, sale and support of a broad range of optical networking and Carrier Ethernet products and services and natural evolutions of such products and services. This license also provides us with an exclusive license to use a narrower set of patents and other intellectual property owned by Nortel in connection with Ciena's manufacture, sale and support of optical networking and Carrier Ethernet products and services within a narrower field of use and subject to certain limitations. As part of this license, we granted Nortel a non-exclusive license to use the patents and other intellectual property (except trademarks) that we acquired as part of the MEN Business in connection with the manufacture and sale of products and services in the fields of Nortel's other businesses (including those businesses sold and to be sold to other parties) and natural evolutions of such fields.

Environmental Matters

Our business and operations are subject to environmental laws in various jurisdictions around the world, including the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) regulations adopted by the European Union. We seek to operate our business in compliance with such laws relating to the materials and content of our products and product takeback and recycling. Environmental regulation is increasing, particularly outside of the United States, and we expect that our domestic and international operations may be subject to additional environmental compliance requirements, which could expose us to additional costs. To date, our compliance costs relating to environmental regulations have not resulted in a material cost or effect on our business, results of operations or financial condition.

Employees

As of October 31, 2011, we had 4,339 employees. We have not experienced any work stoppages and we consider the relationships with our employees to be good. Competition to attract and retain highly skilled technical, engineering and other personnel with experience in our industry is intense. We believe that our future success depends in critical part on our continued ability to recruit, motivate and retain such qualified personnel. None of our employees is bound by an employment agreement.

Directors and Executive Officers

The table below sets forth certain information concerning our directors and executive officers:

Name	Age	Position
Patrick H. Nettles, Ph.D.	68	Executive Chairman of the Board of Directors
Gary B. Smith	51	President, Chief Executive Officer and Director
Stephen B. Alexander	52	Senior Vice President, Chief Technology Officer
Rick Dodd	42	Senior Vice President, Global Marketing
James A. Frodsham	45	Senior Vice President, Chief Strategy Officer
François Locoh-Donou	40	Senior Vice President, Global Products Group
Philippe Morin	46	Senior Vice President, Global Field Operations
James E. Moylan, Jr.	60	Senior Vice President, Finance and Chief Financial Officer
David R. Nachbar	49	Senior Vice President and Chief Human Resources Officer
Andrew C. Petrik	48	Vice President and Controller
David M. Rothenstein	43	Senior Vice President, General Counsel and Secretary
Stephen P. Bradley, Ph.D. (2)(3)	70	Director
Harvey B. Cash (1)(3)	73	Director
Bruce L. Claflin (1)(2)	60	Director
Lawton W. Fitt (2)	58	Director
Judith M. O'Brien (1)(3)	61	Director
Michael J. Rowny (2)	61	Director
Patrick T. Gallagher (2)	56	Director

- (1) Member of the Compensation Committee
- (2) Member of the Audit Committee
- (3) Member of the Governance and Nominations Committee

Our Directors hold staggered terms of office, expiring as follows: Messrs. Bradley, Claflin and Gallagher in 2012; Ms. Fitt, Dr. Nettles and Mr. Rowny in 2013; and Ms. O'Brien and Messrs. Cash and Smith in 2014.

Patrick H. Nettles, Ph.D. has served as a Director of Ciena since April 1994 and as Executive Chairman of the Board of Directors since May 2001. From October 2000 to May 2001, Dr. Nettles was Chairman of the Board and Chief Executive Officer of Ciena, and he was President and Chief Executive Officer from April 1994 to October 2000. Dr. Nettles serves as a Trustee for the California Institute of Technology and serves on the board of directors of Axcelis Technologies, Inc. and The Progressive Corporation. Dr. Nettles also serves on the board of directors of Optiwind Corp, a privately held company, and has previously served on the board of directors of Apptirger, Inc., formerly known as Carrius Technologies, Inc.

Gary B. Smith joined Ciena in 1997 and has served as President and Chief Executive Officer since May 2001. Mr. Smith has served on Ciena's Board of Directors since October 2000. Prior to his current role, his positions with Ciena included Chief Operating Officer, and Senior Vice President, Worldwide Sales. Mr. Smith previously served as Vice President of Sales and Marketing for INTELSAT and Cray Communications, Inc. Mr. Smith also serves on the board of directors for Avaya Inc. and CommVault Systems, Inc. Mr. Smith is a member of the President's National Security Telecommunications Advisory Committee, the Global Information Infrastructure Commission and the Center for Corporate Innovation (CCI).

Stephen B. Alexander joined Ciena in 1994 and has served as Chief Technology Officer since September 1998 and as a Senior Vice President since January 2000. Mr. Alexander has previously served as General Manager of Products & Technology and General Manager of Transport and Switching and Data Networking.

Rick Dodd has served as Ciena's Senior Vice President, Global Marketing since December 2010 and is responsible for Ciena's product, solutions and corporate marketing organizations and provides strategic support to Ciena's global field operations and global products groups. Mr. Dodd previously worked at Infinera Corporation from September 2003 to December 2010 and served in roles including Vice President of Product Marketing and Vice President of Corporate Marketing. Mr. Dodd previously served as Associate Partner at venture capital firm Kleiner, Perkins, Caufield and Byers and as Ciena's

Director, Strategic Marketing.

James Frodsham joined Ciena in May 2004 and has served as Senior Vice President and Chief Strategy Officer since March 2010 with responsibility for our strategic planning and corporate development activities. In August 2010, Mr. Frodsham also assumed responsibility for the integration of the MEN Business, which was substantially completed in fiscal 2011. Mr. Frodsham previously served as Senior Vice President, General Manager of Ciena's former Broadband Access Group from October 2004 to October 2005 and Metro and Enterprise Solutions Group from May 2004 to October 2004. From August 2000 to January 2003, Mr. Frodsham served as chief operating officer of Innovance Networks, an optical networking company. On December 23, 2003, Innovance filed a Notice of Intent to make a proposal pursuant to Part III of the Bankruptcy and Insolvency Act (Canada). Prior to that, Mr. Frodsham was employed for more than ten years in senior level positions with Nortel Networks in product development and marketing strategy, lastly as Vice President, Product Line Marketing, Optical Networking Group, from December 1998 to June 2000. Mr. Frodsham serves on the board of directors of Innovance Networks.

François Locoh-Donou has served as Ciena's Senior Vice President, Global Products Group since August 2011. In this capacity, Mr. Locoh-Donou leads Ciena's engineering, supply chain, product line management, quality/customer advocacy and product marketing and solutions organizations on a global basis. Mr. Locoh-Donou joined Ciena in August 2002 and served as Ciena's Vice President and General Manager, EMEA from June 2005 to August 2011.

Philippe Morin joined Ciena in March 2010 in connection with Ciena's acquisition of Nortel's MEN Business and has served as Senior Vice President, Global Field Operations since August 2011, where he is responsible for leading Ciena's global sales and services organizations. From March 2010 to August 2011, Mr. Morin served as Ciena's Senior Vice President, Global Products Group. Mr. Morin previously served as President of Nortel's MEN Business from May 2006 until Ciena's completion of the MEN Acquisition in March 2010. In January 2009, Nortel Networks Corporation and certain of its subsidiaries filed voluntary petitions in the United States under Chapter 11 of the U.S. Bankruptcy Code. From January 2003 to May 2006, Mr. Morin held the position of Nortel's General Manager of Optical Networks. Mr. Morin previously held other positions at Nortel in manufacturing, marketing, sales and product management both in North America and Europe.

James E. Moylan, Jr. has served as Senior Vice President, Finance and Chief Financial Officer since December 2007. From June 2006 to December 2007, Mr. Moylan served as Executive Vice President and Chief Financial Officer of Swett & Crawford, a wholesale insurance broker. From March 2004 to February 2006, Mr. Moylan served as Executive Vice President and Chief Financial Officer of PRG-Shultz International, Inc., a publicly held recovery audit and business services firm. From June 2002 to April 2003, Mr. Moylan served as Executive Vice President in charge of Composite Panels Distribution and Administration for Georgia-Pacific Corporation's building products business. From November 1999 to May 2002, Mr. Moylan served as Senior Vice President and Chief Financial Officer of SCI Systems, Inc., an electronics contract manufacturing company.

David R. Nachbar has served as Senior Vice President, Chief Human Resources Officer since March 2011. From 2002 to 2008, Mr. Nachbar served as Senior Vice President, Chief Human Resources Officer at Bausch & Lomb. From 1996 to 2002, Mr. Nachbar served as Senior Vice President, Human Resources at The St. Paul Companies, Inc. Prior to 1996, Mr. Nachbar held senior Human Resources roles at Citigroup and PepsiCo.

Andrew C. Petrik joined Ciena in 1996 and has served as Vice President, Controller since August 1997 and served as Treasurer from August 1997 to October 2008.

David M. Rothenstein joined Ciena in January 2001 and has served as Senior Vice President, General Counsel and Secretary since November 2008. Mr. Rothenstein served as Vice President and Associate General Counsel from July 2004 to October 2008 and previously as Assistant General Counsel.

Stephen P. Bradley, Ph.D. has served as a Director of Ciena since April 1998. Professor Bradley is the William Ziegler Professor of Business Administration Emeritus at the Harvard Business School. A member of the Harvard faculty since 1968, Professor Bradley is also Chairman of Harvard's Executive Programs. Professor Bradley currently serves on the board of directors of Transatlantic Reinsurance Holdings and the Risk Management Foundation of the Harvard Medical Institutions, and previously served on the boards of directors of i2 Technologies, Inc., Roadmaster Industries, Inc. and XcelleNet, Inc.

Harvey B. Cash has served as a Director of Ciena since April 1994. Mr. Cash is a general partner of InterWest Partners, a venture capital firm in Menlo Park, California, which he joined in 1985. Mr. Cash serves on the board of directors of First Acceptance Corp., Silicon Laboratories, Inc. and Argonaut Group, Inc. and has previously served on the boards of directors of i2 Technologies, Inc., Voyence, Inc. and Staktek Holdings, Inc.

Bruce L. Claflin has served as a Director of Ciena since August 2006. Mr. Claflin served as President and Chief Executive Officer of 3Com Corporation from January 2001 until his retirement in February 2006. Mr. Claflin joined 3Com as President and Chief Operating Officer in August 1998. Prior to 3Com, Mr. Claflin served as Senior Vice President and General Manager, Sales and Marketing, for Digital Equipment Corporation. Mr. Claflin also worked for 22 years at IBM, where he held various sales, marketing and management positions, including general manager of IBM PC Company's worldwide research and

development, product and brand management, as well as president of IBM PC Company Americas. Mr. Claflin also serves on the board of directors of Advanced Micro Devices (AMD) where he is currently Chairman of the Board.

Lawton W. Fitt has served as a Director of Ciena since November 2000. From October 2002 to March 2005, Ms. Fitt served as Director of the Royal Academy of Arts in London. From 1979 to October 2002, Ms. Fitt was an investment banker with Goldman Sachs & Co., where she was a partner from 1994 to October 2002, and a managing director from 1996 to October 2002. In addition to her service as a director of non-profit organizations, Ms. Fitt currently serves on the board of directors of Thomson Reuters and The Progressive Corporation, and has previously served on the board of directors of Overture Acquisition Corporation and Frontier Communications Company.

Judith M. O'Brien has served as a Director of Ciena since July 2000. Since November 2006, Ms. O'Brien has served as Executive Vice President and General Counsel of Obopay, Inc., a provider of mobile payment services. From February 2001 until October 2006, Ms. O'Brien served as a Managing Director at Incubic Venture Fund, a venture capital firm. Ms. O'Brien was a lawyer with Wilson Sonsini Goodrich & Rosati, where, from February 1984 to February 2001, she was a partner specializing in corporate finance, mergers and acquisitions and general corporate matters. Ms. O'Brien has previously served on the board of directors of Adaptec, Inc.

Michael J. Rowny has served as a Director of Ciena since August 2004. Mr. Rowny has been Chairman of Rowny Capital, a private equity firm, since 1999. From 1994 to 1999, and previously from 1983 to 1986, Mr. Rowny was with MCI Communications in positions including President and Chief Executive Officer of MCI's International Ventures, Alliances and Correspondent group, acting Chief Financial Officer, Senior Vice President of Finance, and Treasurer. Mr. Rowny's career in business and government has also included positions as Chairman and Chief Executive Officer of the Ransohoff Company, Chief Executive Officer of Hermitage Holding Company, Executive Vice President and Chief Financial Officer of ICF Kaiser International, Inc., Vice President of the Bendix Corporation, and Deputy Staff Director of the White House. Mr. Rowny also serves on the board of directors of Neustar, Inc. and Pixspan, Inc. and has previously served on the boards of directors of Llamagraphics, Inc. and Step 9 Software Corporation.

Patrick T. Gallagher has served as a Director of Ciena since May 2009. Mr. Gallagher currently serves as Chairman of Ubiquisys Ltd., a leading developer and supplier of femtocells for the global 3G mobile wireless market. From January 2008 until February 2009, Mr. Gallagher was Chairman of Macro 4 plc, a global software solutions company, and from May 2006 until March 2008, served as Vice Chairman of Golden Telecom Inc., a leading facilities-based provider of integrated communications in Russia and the CIS. From 2003 until 2006, Mr. Gallagher was Executive Vice Chairman and served as Chief Executive Officer of FLAG Telecom Group and, prior to that role, held various senior management positions at British Telecom. Mr. Gallagher also serves on the board of directors of Harmonic Inc. and Sollers JSC.

Item 1A. Risk Factors

Investing in our securities involves a high degree of risk. In addition to the other information contained in this report, you should consider the following risk factors before investing in our securities.

Our revenue and operating results can fluctuate significantly and unpredictably from quarter to quarter.

Our revenue and results of operations can fluctuate significantly and unpredictably from quarter to quarter. Our budgeted expense levels depend in part on our expectations of long-term, future revenue and gross margin, and substantial reductions in expense are difficult and can take time to implement. Uncertainty or lack of visibility into customer spending, and changes in economic or market conditions that affect customer spending, can make it difficult to forecast future revenue and corresponding expense levels. Consequently, our level of operating expense or inventory may be high relative to revenue, which could harm our profitability and cash flow. Increases in the percentage of quarterly revenue relating to orders placed in that quarter, along with significant order volume late in the quarter, could further result in variability and less predictability in our quarterly results.

Additional factors that contribute to fluctuations in our revenue and operating results include:

- broader macroeconomic conditions, including weakness and volatility in global markets, affecting our customers and their consumer and enterprise end users;
- changes in capital spending by large communications service providers;
- seasonal effects in our business, including the timing and size of customer orders;
- the amount of backlog orders we have and our ability to recognize revenue relating to these sales;
- the mix of revenue by product segment, geography and customer in any particular quarter;
- the level of pricing pressure we encounter, particularly for our Packet-Optical Transport products which comprise a significant concentration of our revenue;
- the transition of product sales to new, next-generation technology platforms across our segments; and

- changes in material and labor costs, including our ability to optimize our resources, improve manufacturing efficiencies and achieve cost reductions in our supply chain.

Many factors affecting our results of operations are beyond our control, particularly in the case of large service provider orders and multi-vendor or multi-technology network infrastructure builds, where the achievement of certain thresholds for acceptance is subject to the readiness and performance of the customer or other providers, and changes in customer requirements or installation plans. The factors above may cause our revenue and operating results to fluctuate unpredictably from quarter to quarter. These fluctuations may cause our operating results to be below the expectations of securities analysts or investors, which may cause our stock price to decline.

We face intense competition that could hurt our sales and results of operations.

We face an extremely competitive market for sales of communications networking equipment, software and services and increased competition could result in pricing pressure, reduced demand, lower gross margins and the loss of market share that could harm our business and results of operations. Competition is particularly intense as we and our competitors more aggressively seek to displace incumbent equipment vendors at large carrier customers and secure new customers and additional market share for new, next-generation products. In an effort to secure customer opportunities and capture market share, we have in the past, and may in the future, agree to onerous commercial terms or pricing that result in low or negative gross margins on a particular order or group of orders. We expect this level of competition to continue and potentially increase, particularly in the U.S., as larger Chinese equipment vendors such as Huawei seek to gain market entry and other global competitors seek to retain incumbent positions with customers in the region.

Competition in our markets, generally, is based on any one or a combination of the following factors: price; product features; functionality and performance; service offering; manufacturing capability and lead-times; incumbency and existing business relationships; scalability; and the flexibility of products to meet the immediate and future network and service requirements of customers. A small number of very large companies have dominated our industry, many of which have substantially greater financial and marketing resources, greater manufacturing capacity, broader product offerings and more established relationships with service providers and other customer segments than we do. In addition, a number of these vendors are putting forth competing visions for how next-generation network architectures should be designed. Because of their scale and resources, they may be perceived to be a better fit for the procurement, or network operating and management, strategies of large service providers. We also compete with a number of smaller companies that provide significant competition for a specific product, application, customer segment or geographic market. Due to the narrower focus of their efforts, these competitors may achieve commercial availability of their products more quickly or may be more attractive to customers.

Increased competition in our markets has resulted in aggressive business tactics, including:

- significant price competition, particularly for our Packet-Optical Transport platforms;
- early announcement of product development initiatives and new platform offerings;
- customer financing assistance provided by other vendors or their sponsors;
- assumption of onerous or atypical commercial terms that involve a greater assumption of liability or allocation of risk upon the vendor;
- offers to repurchase our equipment from existing customers; and
- intellectual property assertions and disputes.

The tactics described above can be particularly effective in an increasingly concentrated base of potential customers such as communications service providers. If competitive pressures increase or we fail to compete successfully in our markets, our business and results of operations would suffer.

Our business and operating results could be adversely affected by unfavorable changes in macroeconomic and market conditions and reductions in the level of capital expenditure by customers in response to these conditions.

Global markets have experienced a recent period of significant volatility that has resulted in heightened uncertainty and cautious customer behavior. Broad macroeconomic weakness and market volatility have previously resulted in sustained periods of decreased demand for our products and services that have adversely affected our operating results. Continuation of or an increase in these challenging market conditions and macroeconomic weakness could result in:

- reductions in customer capital spending and delay or deferral of network initiatives;
- difficulty forecasting, budgeting and planning;
- increased competition for fewer network projects and sales opportunities;

- increased pricing pressure that may adversely affect revenue and gross margin;
- higher overhead costs as a percentage of revenue;
- tightening of credit markets to fund capital expenditures by our customers and us;
- customer financial difficulty, including longer collection cycles and other difficulties collecting accounts receivable; and
- increased risk of charges relating to excess and obsolete inventories and the write-off of other intangible assets.

Our business and operating results could be materially adversely affected by reduced customer spending in response to unfavorable or uncertain macroeconomic and market conditions, globally or specific to a particular region where we operate.

Our reliance upon third party manufacturers exposes us to risks that could negatively affect our business and operations.

We rely upon third party contract manufacturers to perform substantially all of the manufacturing of our products and a significant portion of our component sourcing. We do not have contracts in place with some of our manufacturers, do not have guaranteed supply of components or access to manufacturing capacity, and in some cases are utilizing temporary or transitional commercial arrangements. Our reliance upon third party manufacturers could expose us to increased risks related to lead times, continuity of supply, on-time delivery, quality assurance, and compliance with environmental standards and other regulations. Reliance upon third party manufacturers exposes us to significant risks related to their operations, financial position, business continuity, sourcing relationships and labor relationships, that may affect their servicing of Ciena including their continued viability. Our operations may also be affected by geopolitical events, natural disasters, military actions or health pandemics in the countries where our products or critical components are manufactured. Our product manufacturing principally takes place in Mexico, Canada, China and Thailand. Significant disruptions in these countries including natural disasters, epidemics, acts of war or terrorism, social or political unrest or work stoppages, affecting the cost or availability or allocation of supply and manufacturing capacity, would negatively affect our business and results of operations.

In an effort to drive cost reductions and further optimize Ciena's operations, we are working to rationalize our supply chain and consolidate third party contract manufacturers and distribution facilities. We also intend to pursue additional opportunities for direct fulfillment of products from our manufacturers to our customers. There can be no assurance that these efforts, including any reallocation of the third party manufacturing and sourcing or changes in fulfillment involving our manufacturers, will not ultimately result in additional costs, changes in quality or disruptions in our operations and business.

Our reliance upon third party component suppliers, including sole and limited source suppliers, exposes our business to additional risk and could limit our sales capability, increase our costs and harm our customer relationships.

We maintain a global sourcing strategy and depend on third party suppliers for our product components and subsystems, as well as for equipment used to manufacture and test our products. Our products include key optical and electronic components for which reliable, high-volume supply is often available only from sole or limited sources. Increases in market demand or scarcity of resources or manufacturing capability have previously resulted in shortages in availability of important components for our solutions, allocation challenges and increased lead times. Conversely, periods of economic weakness or difficulties in the business of our component suppliers can result in increased costs or discontinuation of components. Our business is also exposed to risk associated with the international locations from which we source our components, including natural disasters, political and social instability. In recent months, several regions of Thailand have experienced severe flooding that has affected the operations of certain component providers in our supply chain, or their suppliers of optical components based in Thailand. There can be no assurance that we will not encounter shortages, extended lead times or other disruptions in the availability or allocation of necessary optical components which could affect our business over the next several fiscal quarters. We are also exposed to risk relating to unfavorable economic conditions or other similar challenges affecting the businesses of our component providers that can affect their liquidity levels, ability to continue to invest in their business, and manufacturing capability.

The difficulties above could result in lost revenue, additional product costs and deployment delays that could harm our business and customer relationships. We do not have any guarantee of supply from these third parties, and in certain cases are relying upon temporary or transitional commercial arrangements. As a result, there is no assurance that we will be able to secure the components or subsystems that we require in sufficient quantity and quality on reasonable terms. The loss of a source of supply, or lack of sufficient availability of key components, could require that we locate an alternate source or redesign our products, each of which could increase our costs and negatively affect our product gross margin and results of operations. Our business and results of operations would be negatively affected if we were to experience any significant disruption or difficulties with key suppliers affecting the price, quality, availability or timely delivery of required components.

A small number of large communications service providers account for a significant portion of our revenue and the loss of any of these customers, or a significant reduction in their spending, would have a material adverse effect on our business and results of operations.

A significant portion of our revenue is concentrated among a few, large global communications service providers. By way of example, AT&T accounted for approximately 15.5% of fiscal 2011 revenue and our largest ten customers contributed 55.9% of fiscal 2011 revenue. Consequently, our financial results are closely correlated with the spending of a relatively small number of service provider customers and can be significantly affected by market or industry changes that affect the businesses of service providers. These factors can include consumer and enterprise spending on communication services, macroeconomic volatility, the adoption of new communications products and services, the emergence of competing network operators and changing demands of end user customers. Because the terms of our frame contracts generally do not include any minimum purchase commitment and spending by these service providers can be unpredictable and sporadic, our revenue and operating results can fluctuate on a quarterly basis. Reliance upon a relatively small number of service providers increases our exposure to changes in the network and purchasing strategies. Some of our customers are pursuing efforts to outsource the management and operation of their networks, or have indicated a procurement strategy to reduce the number of vendors from which they purchase equipment, which may benefit our larger competitors. Our concentration in revenue has increased in the past as a result of consolidation among a number of our largest customers. Consolidation may increase the likelihood of temporary or indefinite reductions in customer spending or changes in network strategy that could harm our business and operating results. The loss of one or more of our large service provider customers, a significant reduction in their spending, or market or industry factors adversely affecting service providers generally, would have a material adverse effect on our business, financial condition and results of operations.

Investment of research and development resources in technologies for which there is not a matching market opportunity, or failure to sufficiently or timely invest in technologies for which there is market demand, would adversely affect our revenue and profitability.

The market for communications networking equipment is characterized by rapidly evolving technologies and changes in market demand. We continually invest in research and development to sustain or enhance our existing products and develop or acquire new product technologies. Our current development efforts are focused upon the platform evolution of our CoreDirector Multiservice Optical Switch family to our 5430 Reconfigurable Switching System, expansion of our service delivery and aggregation switches, and extension of our 40G and 100G coherent technologies and capabilities for our Packet-Optical Transport platforms. There is often a lengthy period between commencing these development initiatives and bringing a new or improved product to market. During this time, technology preferences, customer demand and the market for our products, or those introduced by our competitors, may move in directions we had not anticipated. There is no guarantee that our new products or enhancements will achieve market acceptance or that the timing of market adoption will be as predicted. There is a significant possibility, therefore, that some of our development decisions, including significant expenditures on acquisitions, research and development costs, or investments in technologies, will not turn out as anticipated, and that our investment in some projects will be unprofitable. There is also a possibility that we may miss a market opportunity because we failed to invest, or invested too late, in a technology, product or enhancement sought by our customers, or addressing growth markets or emerging customer segments or applications beyond our traditional customer base. Changes in market demand or investment priorities may also cause us to discontinue existing or planned development for new products or features, which can have a disruptive effect on our relationships with customers. If we fail to make the right investments or fail to make them at the right time, our competitive position may suffer and our revenue and profitability could be harmed.

We may experience delays in the development of our products that may negatively affect our competitive position and business.

Our products are based on complex technology, and we can experience unanticipated delays in developing and manufacturing these solutions. Delays in product development may affect our reputation with customers, affect our ability to seize market opportunities and impact the timing and level of demand for our products. Each step in the development life cycle of our products presents serious risks of failure, rework or delay, any one of which could adversely affect the cost-effective and timely development of our products. We may encounter delays relating to engineering development activities and software, design, sourcing and manufacture of critical components, and the development of prototypes. In addition, intellectual property disputes, failure of critical design elements, and other execution risks may delay or even prevent the release of these products. If we do not successfully develop products in a timely manner, our competitive position may suffer and our business, financial condition and results of operations would be harmed.

Product performance problems and undetected errors affecting the performance, reliability or security of our products could damage our business reputation and negatively affect our results of operations.

The development and production of sophisticated hardware and software for communications network equipment is complicated. Some of our products can be fully tested only when deployed in communications networks or when carrying traffic with other equipment. As a result, undetected defects or errors, and product quality, interoperability, reliability and performance problems are often more acute for initial deployments of new products and product enhancements. We are in the process of launching a number of new platforms across our product segments. Unanticipated product performance problems, including any unforeseen defects or vulnerabilities, can relate to the design, manufacturing and installation of our products, as well as defects in components, software or manufacturing, installation or maintenance services supplied by third parties. These product performance, reliability, security and quality problems can negatively affect our business, including:

- increased costs to remediate software or hardware defects or replace products;
- payment of liquidated damages, contractual or similar penalties, or other claims for performance failures or delays;
- increased inventory obsolescence;
- increased warranty expense or estimates resulting from higher failure rates, additional field service obligations or other rework costs related to defects;
- costs and claims that may not be covered by liability insurance coverage or recoverable from third parties;
- delays in recognizing revenue or collecting accounts receivable; and
- damage to our reputation, declining sales and order cancellations.

These consequences of product defects or problems relating to quality, reliability and security of our products, including any significant costs to remediate, could negatively affect our business and results of operations.

Network equipment sales to large communications service providers often involve lengthy sales cycles and protracted contract negotiations and may require us to assume commercial terms or conditions that negatively affect pricing, risk allocation, payment and the timing of revenue recognition.

Our future success will depend in large part on our ability to maintain and expand our sales to large communications service providers. These sales typically involve lengthy sales cycles, extensive product testing, and demonstration laboratory or network certification, including network-specific or region-specific product certification or homologation processes. These sales also often involve protracted and sometimes difficult contract negotiations in which we may deem it necessary to agree to unfavorable contract terms or conditions that adversely affect pricing, expose us to penalties for delays or non-performance, allocate to us a disproportionate amount of risk, and extend the timing of payment and revenue recognition. We may also be requested to provide deferred payment terms, vendor or third-party financing, or offer other alternative purchase structures. These terms may negatively affect our revenue and results of operations and increase our risk and susceptibility to quarterly fluctuations in our results. Service providers may ultimately insist upon terms and conditions that we deem too onerous or not in our best interest. Moreover, our purchase agreements generally do not include minimum purchase commitments and customers often have the right to modify, delay, reduce or cancel previous orders. As a result, we may incur substantial expense and devote time and resources to potential sales opportunities that never materialize or result in lower than anticipated sales.

Efforts by us or our strategic third party channel partners to sell our solutions into targeted geographic markets and customer segments may be unsuccessful.

We continue to take steps, including sales initiatives and strategic channel relationships, to sell our products into new markets, growth geographies and diverse customer segments beyond our traditional service provider customer base. Specifically, we are targeting opportunities in Brazil, the Middle East, Russia, Japan and India. We are also targeting sales opportunities with enterprises, wireless operators, cable operators, submarine network operators, Internet content providers, cloud infrastructure providers, research and education institutions, and federal, state and local governments. We believe sales to these customer segments, as well as emerging network operators supporting new communications services and applications, will be an important component of our growth strategy. In many cases, we have less experience in these markets and customer segments and they may have less familiarity with our company. To succeed in some of these geographic markets and customer segments we intend to leverage strategic sales channels and distribution arrangements. We expect these relationships to be an important part of our business internationally as well as for sales in support of network applications including cloud-based enterprise opportunities. Difficulties selling into these markets and customer segments, whether through internal resources or strategic,

third party channels, could limit our growth and results of operations.

The international scale of our operations could expose us to additional risks and expense and adversely affect our results of operations.

We market, sell and service our products globally and rely upon a global supply chain for sourcing of important components and manufacturing of our products. International operations are subject to inherent risks, including:

- effects of changes in currency exchange rates;
- more unfavorable commercial terms;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulties and costs of staffing and managing foreign operations;
- the impact of economic conditions in countries outside the United States;
- less protection for intellectual property rights in some countries;
- adverse tax and customs consequences, particularly as related to transfer-pricing issues;
- social, political and economic instability;
- higher incidence of corruption or unethical business practices that could expose us to liability or damage our reputation;
- trade protection measures, export compliance, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements; and
- natural disasters, epidemics and acts of war or terrorism.

Moreover, while we have seen early progress and sales opportunities with new customers in the Middle East, there can be no assurance that recent instability and unrest in the region will not adversely affect our business, operations and financial results relating to these and other opportunities. We expect that we may enter new markets and withdraw from or reduce operations in others. In some countries, our success will depend in part on our ability to form relationships with local sales, service or fulfillment partners. Our inability to identify appropriate partners or reach mutually satisfactory arrangements could adversely affect our business and operations. Our global operations may result in increased risk and expense to our business and could give rise to unanticipated liabilities or difficulties that could adversely affect our operations and financial results.

We may be required to write off significant amounts of inventory as a result of our inventory purchase practices, the convergence of product lines or unfavorable market conditions.

To avoid delays and meet customer demand for shorter delivery terms, we place orders with our contract manufacturers and suppliers to manufacture components and complete assemblies based in part on forecasts of customer demand. As a result, our inventory purchases expose us to the risk that our customers either will not order the products we have forecast, or will purchase fewer products than forecast. Market uncertainty can limit our visibility into customer spending plans and compound the difficulty of forecasting inventory at appropriate levels. Moreover, our customer purchase agreements generally do not include any minimum purchase commitment, and customers often have the right to modify, reduce or cancel purchase quantities. As a result, we may purchase inventory in anticipation of sales that ultimately do not occur. Historically, our inventory write-offs have resulted from the circumstances above. As features and functionalities converge across our product lines, and we introduce new products with overlapping feature sets, however, we face an additional risk that customers may forego purchases of one product we have inventoried in favor of another product with similar functionality. If we are required to write off or write down a significant amount of inventory, our results of operations for the period would be materially adversely affected.

Our intellectual property rights may be difficult and costly to enforce.

We generally rely on a combination of patents, copyrights, trademarks and trade secret laws to establish and maintain proprietary rights in our products and technology. Although we have been issued numerous patents and other patent applications are currently pending, there can be no assurance that any of these patents or other proprietary rights will not be challenged, invalidated or circumvented or that our rights will provide us with any competitive advantage. In addition, there can be no assurance that patents will be issued from pending applications or that claims allowed on any patents will be sufficiently broad to protect our technology. Further, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States.

We are subject to the risk that third parties may attempt to use our intellectual property without authorization. Protecting against the unauthorized use of our products, technology and other proprietary rights is difficult, time-consuming and expensive,

and we cannot be certain that the steps that we are taking will prevent or minimize the risks of such unauthorized use. Litigation may be necessary to enforce or defend our intellectual property rights or to determine the validity or scope of the proprietary rights of others. Such litigation could result in substantial cost and diversion of management time and resources, and there can be no assurance that we will obtain a successful result. Any inability to protect and enforce our intellectual property rights, despite our efforts, could harm our ability to compete effectively.

We may incur significant costs in response to claims by others that we infringe their intellectual property rights.

From time to time third parties may assert claims or initiate litigation or other proceedings related to patent, copyright, trademark and other intellectual property rights to technologies and related standards that are relevant to our business. These assertions have increased over time due to our growth, the increased number of products and competitors in the communications network equipment industry and the corresponding overlaps, and the general increase in the rate of patent claims assertions both by operating entities and third party non-practicing entities (sometimes referred to as “patent trolls”), particularly in the United States and Canada. Asserted claims, litigation or other proceedings can include claims against us or our manufacturers, suppliers or customers, alleging infringement of third party proprietary rights with respect to our existing or future products and technology or components of those products. Regardless of the merit of these claims, they can be time-consuming, divert the time and attention of our technical and management personnel, and result in costly litigation. These claims, if successful, can require us to:

- pay substantial damages or royalties;
- comply with an injunction or other court order that could prevent us from offering certain of our products;
- seek a license for the use of certain intellectual property, which may not be available on commercially reasonable terms or at all;
- develop non-infringing technology, which could require significant effort and expense and ultimately may not be successful; and
- indemnify our customers pursuant to contractual obligations and pay damages on their behalf.

Any of these events could adversely affect our business, results of operations and financial condition. Our exposure to risks associated with the use of intellectual property may be increased as a result of acquisitions, as we have a lower level of visibility into the development process with respect to such technology or the steps taken to safeguard against the risks of infringing the rights of third parties.

Our failure to manage effectively our relationships with third party service partners could adversely impact our financial results and relationship with customers.

We rely on a number of third party service partners, both domestic and international, to complement our global service and support resources. We rely upon these partners for certain installation, maintenance and support functions. In order to ensure the proper installation and maintenance of our products, we must identify, train and certify qualified service partners. Certification can be costly and time-consuming, and our partners often provide similar services for other companies, including our competitors. We may not be able to manage effectively our relationships with our service partners and cannot be certain that they will be able to deliver services in the manner or time required. We may also be exposed to liability relating to the performance of our service partners. If our service partners are unsuccessful in delivering services:

- we may suffer delays in recognizing revenue;
- our services revenue and gross margin may be adversely affected; and
- our relationship with customers could suffer.

If we do not manage effectively our relationships with third party service partners, or they fail to perform these services in the manner or time required, our financial results and relationship with customers could be adversely affected.

We may be exposed to unanticipated risks and additional obligations in connection with our resale of complementary products or technology of other companies.

We have entered into agreements with strategic partners that permit us to distribute their products or technology. We may rely upon these relationships to add complementary products or technologies, diversify our product portfolio, or address a particular customer or geographic market. We may enter into additional original equipment manufacturer (OEM), resale or similar strategic arrangements in the future, including in support of our selection as a domain supply partner with AT&T. We may incur unanticipated costs or difficulties relating to our resale of third party products. Our third party relationships could

expose us to risks associated with the business and viability of such partners, as well as delays in their development, manufacturing or delivery of products or technology. We may also be required by customers to assume warranty, indemnity, service and other commercial obligations, including potential liability to customers, greater than the commitments, if any, made to us by our technology partners. Some of our strategic partners are relatively small companies with limited financial resources. If they are unable to satisfy their obligations to us or our customers, we may have to expend our own resources to satisfy these obligations. Exposure to these risks could harm our reputation with key customers and negatively affect our business and our results of operations.

Our exposure to the credit risks of our customers and resellers may make it difficult to collect receivables and could adversely affect our revenue and operating results.

In the course of our sales to customers, we may have difficulty collecting receivables and could be exposed to risks associated with uncollectible accounts. We may be exposed to similar risks relating to third party resellers and other sales channel partners. Lack of liquidity in the capital markets, macroeconomic weakness and market volatility may increase our exposure to credit risks. Our attempts to monitor these situations carefully and take appropriate measures to protect ourselves may not be sufficient, and it is possible that we may have to write down or write off doubtful accounts. Such write-downs or write-offs could negatively affect our operating results for the period in which they occur, and, if large, could have a material adverse effect on our revenue and operating results.

Our business is dependent upon the proper functioning of our internal business processes and information systems and modification or interruption of such systems may disrupt our business, processes and internal controls.

The proper functioning of our internal business processes and information systems is critical to the efficient operation and management of our business. If these information technology systems fail or are interrupted, our operations may be adversely affected and operating results could be harmed. Our business processes and information systems need to be sufficiently scalable to support the future growth of our business and may require modifications or upgrades that expose us to a number of operational risks. We are currently pursuing initiatives to transform and optimize our business operations through the reengineering of certain processes, investment in automation and engagement of strategic partners or resources to assist with select business functions. These changes may be costly and disruptive to our operations, and could impose substantial demands on management time. These changes may also require changes in system design, the modification of internal control procedures and significant training of employees or third party resources. Our information technology systems, and those of third party providers, may also be vulnerable to damage or disruption caused by circumstances beyond our control. These include catastrophic events, power anomalies or outages, natural disasters, computer system or network failures, viruses or malware, physical or electronic break-ins, unauthorized access and cyber attacks. Any material disruption, malfunction or similar challenges with our business processes or information systems, or disruptions or challenges relating to the transition to new processes, systems or providers, could have a material adverse effect on the operation of our business and our results of operations.

Outstanding indebtedness under our convertible notes may adversely affect our liquidity and results of operations and could limit our business.

At October 31, 2011, indebtedness on our outstanding convertible notes totaled approximately \$1.4 billion in aggregate principal. Our indebtedness could have important negative consequences, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing, particularly in light of unfavorable conditions in the capital and credit markets;
- debt service and repayment obligations that reduce the availability of cash resources for other purposes, including capital expenditures;
- limiting our flexibility in planning for, or reacting to, changes in our business and the markets in which we compete; and
- placing us at a possible competitive disadvantage to competitors that have better access to capital resources.

We may also add additional indebtedness such as equipment loans, working capital lines of credit and other long-term debt.

Significant volatility and uncertainty in the capital markets may limit our access to funding.

We have accessed the capital markets in the past and successfully raised funds, through the issuance of equity or convertible

debt, to increase our cash position, support our operations and undertake strategic growth initiatives, including the MEN Acquisition. We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our long-term operating plans and may consider raising additional capital in the future. Global capital markets have undergone a sustained period of significant volatility and uncertainty and there can be no assurance that such financing alternatives would be available to us, should we determine it necessary or advisable to seek additional cash resources.

Facilities transitions could be disruptive to our operations and result in unanticipated expense.

During fiscal 2011, we received notice of early termination from Nortel shortening the lease of our “Lab 10” building on the Carling Campus in Ottawa, Canada from ten to five years, with the lease termination set to occur in fiscal 2015. This is our largest facility, which includes a sophisticated research and development lab and key engineering personnel. We are currently considering facilities alternatives arising as a result of the early termination of this lease, however locating appropriate alternative space for our engineering operations in Ottawa may be costly and there can be no assurance that the transition of key engineering functions to a successor facility will not be disruptive or adversely affect productivity. Additionally, in November 2011, we entered into a lease for our new corporate headquarters and anticipate transitioning affected employees and operations, including key management and administration resources, to this new facility commencing in fiscal 2012. These facilities transitions could be disruptive to our operations and could result in unanticipated expense that adversely affects our financial results.

Restructuring activities could disrupt our business and affect our results of operations.

We have previously taken steps, including reductions in force, office closures, and internal reorganizations to reduce the size and cost of our operations and to better match our resources with market opportunities. We may take similar steps in the future as we seek to realize operating synergies, optimize our operations and achieve our desired target operating model and profitability. These changes could be disruptive to our business and may result in significant expense including accounting charges for inventory and technology-related write-offs, workforce reduction costs and charges relating to consolidation of excess facilities. Substantial expense or charges resulting from restructuring activities could adversely affect our results of operations in the period in which we take such a charge.

If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively.

Competition to attract and retain highly skilled technical, engineering and other personnel with experience in our industry is intense and our employees have been the subject of targeted hiring by our competitors. We may experience difficulty retaining and motivating existing employees and attracting qualified personnel to fill key positions. Because we rely upon equity awards as a significant component of compensation, particularly for our executive team, a lack of positive performance in our stock price, reduced grant levels, or changes to our compensation program may adversely affect our ability to attract and retain key employees. It may be difficult to replace members of our management team or other key personnel, and the loss of such individuals could be disruptive to our business. In addition, none of our executive officers is bound by an employment agreement for any specific term. If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively and our operations and results of operations could suffer.

We may be adversely affected by fluctuations in currency exchange rates.

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. Historically, our sales were primarily denominated in U.S. dollars. As a result of our increased global presence, a larger percentage of our revenue and operating expense are now non-U.S. dollar denominated and therefore subject to foreign currency fluctuation. We face exposure to currency exchange rates as a result of the growth in our non-U.S. dollar denominated operating expense in Canada, Europe, Asia and Latin America. From time to time, we may hedge against currency exposure associated with anticipated foreign currency cash flows. There can be no assurance that any hedging instruments will be effective and losses associated with these instruments and the adverse effect of foreign currency exchange rate fluctuation may negatively affect our results of operations.

Our products incorporate software and other technology under license from third parties and our business would be adversely affected if this technology was no longer available to us on commercially reasonable terms.

We integrate third-party software and other technology into our embedded operating system, network management system tools and other products. Licenses for this technology may not be available or continue to be available to us on commercially reasonable terms. Third party licensors may insist on unreasonable financial or other terms in connection with our use of such technology. Difficulties with third party technology licensors could result in termination of such licenses, which may result in significant costs and require us to obtain or develop a substitute technology. Difficulty obtaining and maintaining third-party

technology licenses may disrupt development of our products and increase our costs, which could harm our business.

Strategic acquisitions and investments may expose us to increased costs and unexpected liabilities.

We may acquire or make investments in other technology companies, or enter into other strategic relationships, to expand the markets we address, diversify our customer base or acquire or accelerate the development of technology or products. To do so, we may use cash, issue equity that would dilute our current stockholders' ownership, or incur debt or assume indebtedness. These transactions involve numerous risks, including:

- significant integration costs;
- disruption due to the integration and rationalization of operations, products, technologies and personnel;
- diversion of management's attention;
- difficulty completing projects of the acquired company and costs related to in-process projects;
- the loss of key employees;
- ineffective internal controls over financial reporting;
- dependence on unfamiliar suppliers or manufacturers;
- exposure to unanticipated liabilities, including intellectual property infringement claims; and
- adverse tax or accounting effects including amortization expense related to intangible assets and charges associated with impairment of goodwill.

As a result of these and other risks, our acquisitions, investments or strategic transactions may not reap the intended benefits and may ultimately have a negative impact on our business, results of operation and financial condition.

Changes in government regulation affecting the communications industry and the businesses of our customers could harm our prospects and operating results.

The Federal Communications Commission, or FCC, has jurisdiction over the U.S. communications industry and similar agencies have jurisdiction over the communication industries in other countries. Many of our largest customers are subject to the rules and regulations of these agencies. Changes in regulatory requirements applicable to wireline or wireless communications and the Internet in the United States or other countries could inhibit service providers from investing in their communications network infrastructures or introducing new services. These changes could adversely affect the sale of our products and services. Changes in regulatory tariff requirements or other regulations relating to pricing or terms of carriage on communications networks could slow the development or expansion of network infrastructures and adversely affect our business, operating results, and financial condition.

Governmental regulations affecting the use, import or export of products could negatively affect our revenue.

The United States and various foreign governments have imposed controls, license requirements and other restrictions on the usage, import or export of some of the technologies that we sell. Governmental regulation of usage, import or export of our products, technology within our products, or our failure to obtain required approvals for our products, could harm our international and domestic sales and adversely affect our revenue and costs of sales. Failure to comply with such regulations could result in enforcement actions, fines or penalties and restrictions on export privileges. In addition, costly tariffs on our equipment, restrictions on importation, trade protection measures and domestic preference requirements of certain countries could limit our access to these markets and harm our sales. For example, India's government has recently implemented and is considering additional security regulations applicable to network equipment vendors, and has imposed significant tariffs that may inhibit sales of certain communications equipment; including equipment manufactured in China, where certain of our products are assembled. These and other regulations could adversely affect the sale or use of our products, substantially increase our cost of sales and could adversely affect our business and revenue.

Governmental regulations related to the environment and potential climate change, could adversely affect our business and operating results.

Our operations are regulated under various federal, state, local and international laws relating to the environment and potential climate change. We could incur fines, costs related to damage to property or personal injury, and costs related to investigation or remediation activities, if we were to violate or become liable under these laws or regulations. Our product design efforts, and the manufacturing of our products, are also subject to evolving requirements relating to the presence of certain materials or substances in our equipment, including regulations that make producers for such products financially responsible for the collection, treatment and recycling of certain products. For example, our operations and financial results may be negatively affected by environmental regulations, such as the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) that have been adopted by the European

Union. Compliance with these and similar environmental regulations may increase our cost of designing, manufacturing, selling and removing our products. These regulations may also make it difficult to obtain supply of compliant components or require us to write off non-compliant inventory, which could have an adverse effect on our business and operating results.

We may be required to write down long-lived assets and these impairment charges would adversely affect our operating results.

As of October 31, 2011, our balance sheet includes \$504.6 million in long-lived assets, which includes \$331.6 million million of intangible assets. Valuation of our long-lived assets requires us to make assumptions about future sales prices and sales volumes for our products. These assumptions are used to forecast future, undiscounted cash flows. Given the significant uncertainty and instability of macroeconomic conditions in recent periods, forecasting future business is difficult and subject to modification. If actual market conditions differ or our forecasts change, we may be required to reassess long-lived assets and could record an impairment charge. Any impairment charge relating to long-lived assets would have the effect of decreasing our earnings or increasing our losses in such period. If we are required to take a substantial impairment charge, our operating results could be materially adversely affected in such period.

Failure to maintain effective internal controls over financial reporting could have a material adverse effect on our business, operating results and stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 requires that we include in our annual report a report containing management's assessment of the effectiveness of our internal controls over financial reporting as of the end of our fiscal year and a statement as to whether or not such internal controls are effective. Compliance with these requirements has resulted in, and is likely to continue to result in, significant costs and the commitment of time and operational resources. Changes in our business, including certain initiatives to transform business processes, invest in information systems or transition certain functions to third party resources or providers, will necessitate modifications to our internal control systems, processes and information systems as we optimize our business and operations. Our increased global operations and expansion into new regions could pose additional challenges to our internal control systems. We cannot be certain that our current design for internal control over financial reporting, or any additional changes to be made, will be sufficient to enable management to determine that our internal controls are effective for any period, or on an ongoing basis. If we are unable to assert that our internal controls over financial reporting are effective, our business may be harmed. Market perception of our financial condition and the trading price of our stock may be adversely affected, and customer perception of our business may suffer.

Our stock price is volatile.

Our common stock price has experienced substantial volatility in the past and may remain volatile in the future. Volatility in our stock price can arise as a result of a number of the factors discussed in this "Risk Factors" section. During fiscal 2011, our closing stock price ranged from a high of \$28.81 per share to a low of \$10.28 per share. The stock market has experienced extreme price and volume fluctuations that have affected the market price of many technology companies, with such volatility often unrelated to the operating performance of these companies. Divergence between our actual or anticipated financial results and published expectations of analysts can cause significant swings in our stock price. Our stock price can also be affected by announcements that we, our competitors, or our customers may make, particularly announcements related to acquisitions or other significant transactions. Our common stock is included in a number of market indices and any change in the composition of these indices to exclude our company would adversely affect our stock price. These factors, as well as conditions affecting the general economy or financial markets, may materially adversely affect the market price of our common stock in the future.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Overview. As of October 31, 2011, all of our properties are leased and we do not own any real property. We lease facilities globally related to the ongoing operations of our four business segments and related functions. Our principal executive offices are located in Linthicum, Maryland, where we currently occupy six buildings at various sites, including an engineering facility, two supply chain and logistics facilities, and three administrative and sales facilities. Due to the expiration of certain of these leases, commencing in fiscal 2012, in November 2011, we entered into a new lease for our corporate headquarters described below.

Our largest facility is our research and development center located at "Lab 10" on the former Nortel Carling Campus in Ottawa, Canada. See below for information regarding the lease associated with this engineering facility. We also have engineering and/or service facilities located in San Jose, California; Alpharetta, Georgia; Spokane, Washington; Kanata,

Canada; and Gurgaon, India. In addition, we lease various smaller offices in the United States, Mexico, South America, Europe, the Middle East and Asia-Pacific to support our sales and services operations. We believe the facilities we are now using are adequate and suitable for our business requirements.

Linthicum, MD Headquarters Lease. On November 3, 2011, Ciena Corporation entered into a Lease Agreement (Lease) with W2007 RDG Realty, L.L.C. (Landlord), relating to office space for a new corporate headquarters in the building located at 7035 Ridge Road, Hanover, Maryland (Building 1) and a building to be built at 7031 Ridge Road, Hanover, Maryland (Building 2), consisting of an aggregate agreed-upon rentable area of approximately 154,100 square feet.

The Building 1 lease commencement date will be the earlier of the date of our occupancy or substantial completion of the improvements to the premises in accordance with the terms of the Lease, but in either case no earlier than June 1, 2012. The Building 1 rent commencement date will be the later of September 1, 2013 or substantial completion of improvements to the premises in accordance with the terms of the Lease. The Building 2 lease commencement date and rent commencement date will be upon Landlord's delivery of the premises following substantial completion of the construction of Building 2 and improvements to the premises in accordance with the terms of the Lease (expected to be no later than November 15, 2012). Subject to adjustment and earlier termination as provided in the Lease, the Lease (which relates to both Building 1 and Building 2) will expire 14 years and eight months from the Building 1 lease commencement date. We have the option to renew the Lease for two additional periods of five years each. We also have a right of first offer relating to additional space in the complex of buildings that includes Building 1 and Building 2.

If the Building 2 rent commencement date coincided with the Building 1 rent commencement date, the initial annual basic rent would be approximately \$3.8 million, exclusive of certain customary operating expenses. The annual basic rent rate will escalate at a rate of two percent (2.0 %) each year, and, beginning in calendar year 2014, we will be responsible for increases in certain operating expenses and real estate taxes over the amounts incurred in calendar year 2013. The Lease also provides that Landlord will contribute towards costs incurred for certain tenant improvements to our premises in Building 1 and Building 2 and will bear all costs for the construction of Building 2.

We have the right to terminate the Lease if certain milestones with respect to the construction of Building 2 are not achieved in a timely manner. We also have the one-time right to terminate the Lease with respect to all or a portion of the leased premises at any time after the tenth (10th) year, provided that we have not exercised our renewal option, pay a termination fee to Landlord, and comply with certain requirements as set forth in the Lease. Landlord has the right to terminate the Lease upon an event of default, which includes our failure to pay rent, failure to provide an estoppel certificate, failure to maintain insurance, failure to release mechanic's liens, uncured breach of our other obligations under the Lease, or insolvency.

Carling, Ottawa Lease. Upon the completion of the MEN Acquisition, Ciena Canada Inc., a subsidiary of Ciena, entered into a lease agreement with Nortel Networks Technology Corp. ("Landlord") relating to the "Lab 10" building on Nortel's Carling Campus in Ottawa, Canada (the "Carling lease"). This facility consists of a rentable area of 265,000 square feet for which we incur lease expense of approximately \$7.2 million CAD per year, consisting of both base rent and fixed additional operating expense, the latter of which increases at 2% per year. The Carling lease initially had a ten-year term, subject to an early termination feature that allowed Nortel to reduce the term of the lease in exchange for its payment of an early termination fee of up to \$33.5 million. During the first quarter of fiscal 2011, Ciena received both notice of early termination from Nortel shortening the Carling lease to five years and the corresponding \$33.5 million early termination payment.

Restructuring. We lease properties that we no longer occupy. As part of our restructuring costs, we provide for the estimated cost of the future net lease expense for these facilities. The cost is based on the fair value of future minimum lease payments under contractual obligations offset by the fair value of the estimated future sublease payments that we may receive. As of October 31, 2011, our accrued restructuring liability related to these properties was \$3.3 million. If actual market conditions relating to the use of these facilities are less favorable than those projected by management, additional restructuring costs associated with these facilities may be required. For additional information regarding our lease obligations, see Note 22 to the Consolidated Financial Statements in Item 8 of Part II of this annual report.

Item 3. Legal Proceedings

On July 29, 2011, Cheetah Omni LLC filed a complaint in the United States District Court for the Eastern District of Texas against Ciena and several other defendants, alleging, among other things, that certain of the parties' products infringe upon multiple U.S. Patents relating to certain reconfigurable optical add-drop multiplexer (ROADM) technologies. The complaint seeks injunctive relief and damages. On November 8, 2011, Ciena filed an answer and counterclaims to Cheetah Omni's amended complaint. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties' products infringe U.S. Patent

6,542,673 (the “673 Patent”), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. Ciena filed an answer to the complaint and counterclaims against Graywire on April 17, 2009. On April 27, 2009, Ciena and certain other defendants filed an application for inter partes reexamination of the '673 Patent with the U.S. Patent and Trademark Office (the “PTO”). On the same date, Ciena and the other defendants filed a motion to stay the case pending reexamination of all of the patents-in-suit. On July 17, 2009, the district court granted the defendants' motion to stay the case. On July 23, 2009, the PTO granted the defendants' application for reexamination with respect to certain claims of the '673 Patent and, on December 17, 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims. On February 28, 2011, Ciena and the other defendants filed an appeal with respect to certain aspects of the PTO's determination. Separately, on March 17, 2011, the PTO granted a third party application for ex parte reexamination with respect to certain claims of the '673 Patent and, on September 2, 2011, the PTO issued a non-final rejection of those claims. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously in the event the stay of the case is lifted.

As a result of its June 2002 acquisition of ONI Systems Corp., Ciena became a defendant in a securities class action lawsuit filed in the United States District Court for the Southern District of New York in August 2001. The complaint named ONI, certain former ONI officers, and certain underwriters of ONI's initial public offering (IPO) as defendants, and alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements (such as undisclosed commissions or stock stabilization practices) in ONI's registration statement and by engaging in manipulative practices to artificially inflate ONI's stock price after the IPO. The complaint also alleges that ONI and the named former officers violated the securities laws by failing to disclose the underwriters' alleged compensation arrangements and manipulative practices. No specific amount of damages has been claimed. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. The former ONI officers have been dismissed from the action without prejudice. In July 2004, following mediated settlement negotiations, the plaintiffs, the issuer defendants (including Ciena), and their insurers entered into a settlement agreement. The settlement agreement did not require Ciena to pay any amount toward the settlement or to make any other payments. While the partial settlement was pending approval, the plaintiffs continued to litigate their cases against the underwriter defendants. In October 2004, the district court certified a class with respect to the Section 10(b) claims in six “focus cases” selected out of all of the consolidated cases, which cases did not include Ciena, and which decision was appealed by the underwriter defendants to the U.S. Court of Appeals for the Second Circuit. On February 15, 2005, the district court granted the motion for preliminary approval of the settlement agreement, subject to certain modifications, and on August 31, 2005, the district court issued a preliminary order approving the revised stipulated settlement agreement. On December 5, 2006, the U.S. Court of Appeals for the Second Circuit vacated the district court's grant of class certification in the six focus cases. On April 6, 2007, the Second Circuit denied plaintiffs' petition for rehearing. In light of the Second Circuit's decision, the parties agreed that the settlement could not be approved. On June 25, 2007, the district court approved a stipulation filed by the plaintiffs and the issuer defendants terminating the proposed settlement. On August 14, 2007, the plaintiffs filed second amended complaints against the defendants in the six focus cases. On September 27, 2007, the plaintiffs filed a motion for class certification based on their amended complaints and allegations. On March 26, 2008, the district court denied motions to dismiss the second amended complaints filed by the defendants in the six focus cases, except as to Section 11 claims raised by those plaintiffs who sold their securities for a price in excess of the initial offering price and those who purchased outside the previously certified class period. Briefing on the plaintiffs' motion for class certification in the focus cases was completed in May 2008. That motion was withdrawn without prejudice on October 10, 2008. On April 2, 2009, a stipulation and agreement of settlement between the plaintiffs, issuer defendants and underwriter defendants was submitted to the Court for preliminary approval. The Court granted the plaintiffs' motion for preliminary approval and preliminarily certified the settlement classes on June 10, 2009. The settlement fairness hearing was held on September 10, 2009. On October 6, 2009, the Court entered an opinion granting final approval to a settlement among the plaintiffs, issuer defendants and underwriter defendants, and directing that the Clerk of the Court close these actions. All appeals of the opinion granting final approval have been either resolved or dismissed, except one. On August 25, 2011, on remand from the Second Circuit, the District Court determined that the last remaining appellant did not have standing to assert his appeal. Due to the inherent uncertainties of litigation and because the settlement remains subject to appeal, the ultimate outcome of the matter is uncertain.

In addition to the matters described above, we are subject to various legal proceedings, claims and litigation arising in the ordinary course of business. We do not expect that the ultimate costs to resolve these matters will have a material effect on our results of operations, financial position or cash flows.

Item 4. Removed and Reserved

PART II

Item 5. Market for Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities

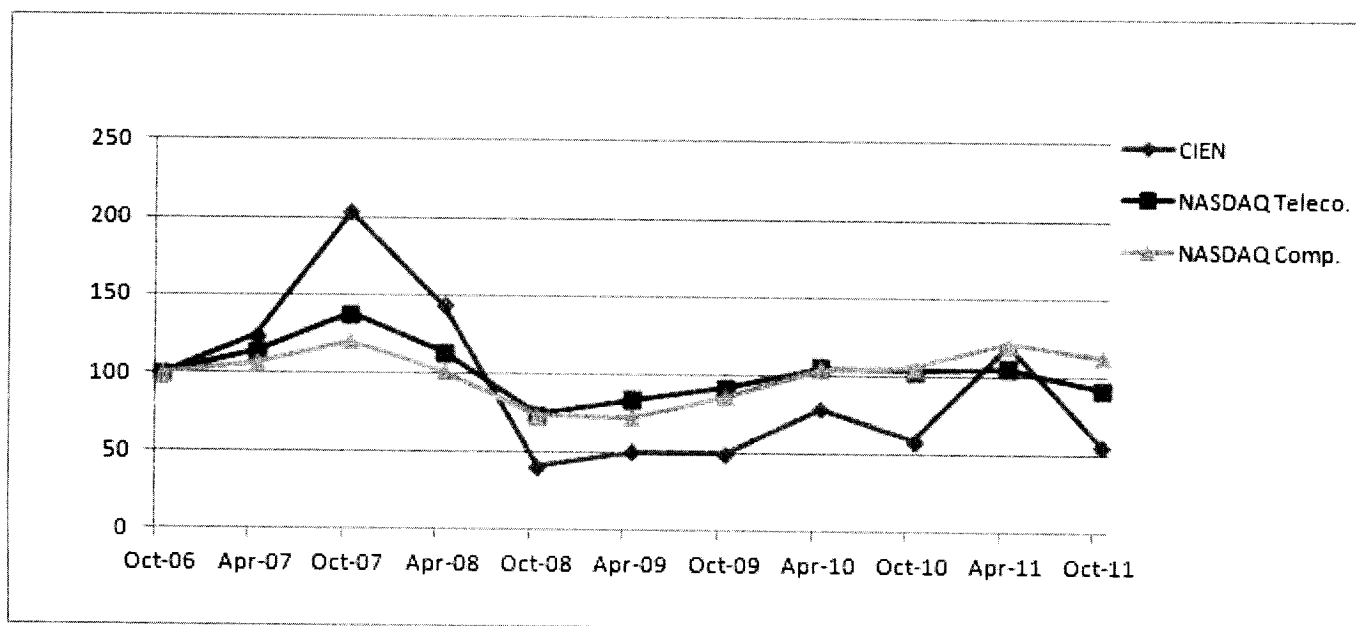
- (a) Our common stock is traded on the NASDAQ Global Select Market under the symbol “CIEN.” The following table sets

forth the high and low sales prices of our common stock, as reported on the NASDAQ Global Select Market, for the fiscal periods indicated.

	High	Low
Fiscal Year 2010		
First Quarter ended January 31	\$ 14.02	\$ 10.67
Second Quarter ended April 30	\$ 18.59	\$ 12.76
Third Quarter ended July 31	\$ 19.24	\$ 12.29
Fourth Quarter ended October 31	\$ 15.69	\$ 12.02
Fiscal Year 2011		
First Quarter ended January 31	\$ 25.49	\$ 13.55
Second Quarter ended April 30	\$ 28.81	\$ 22.03
Third Quarter ended July 31	\$ 27.91	\$ 15.46
Fourth Quarter ended October 31	\$ 14.82	\$ 10.28

As of December 15, 2011, there were approximately 884 holders of record of our common stock and 97,442,608 shares of common stock outstanding. We have never paid cash dividends on our capital stock. We intend to retain earnings for use in our business and we do not anticipate paying any cash dividends in the foreseeable future.

The following graph shows a comparison of cumulative total returns for an investment in our common stock, the NASDAQ Telecommunications Index and the NASDAQ Composite Index from October 31, 2006 to October 31, 2011. The NASDAQ Composite Index measures all domestic and international based common stocks listed on The Nasdaq Stock Market. The NASDAQ Telecommunications Index contains securities of NASDAQ-listed companies classified according to the Industry Classification Benchmark as Telecommunications and Telecommunications Equipment. They include providers of fixed-line and mobile telephone services, and makers and distributors of high-technology communication products. This graph is not deemed to be "filed" with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, and the graph shall not be deemed to be incorporated by reference into any prior or subsequent filing by us under the Securities Act of 1933 or the Exchange Act.



Assumes \$100 invested in Ciena Corporation, the NASDAQ Telecommunications Index and the NASDAQ Composite Index on October 31, 2006 with all dividends reinvested at month-end.

(b) Not applicable.

(c) Not applicable.

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements and the notes thereto included in Item 8, “Financial Statements and Supplementary Data.” We have a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31. Fiscal 2008, 2009, 2010 and 2011 consisted of 52 weeks and fiscal 2007 consisted of 53 weeks.

	Year Ended October 31, (in thousands)				
	2007	2008	2009	2010	2011
Cash and cash equivalents	\$ 892,061	\$ 550,669	\$ 485,705	\$ 688,687	\$ 541,896
Short-term investments	\$ 822,185	\$ 366,336	\$ 563,183	\$ —	\$ —
Long-term investments	\$ 33,946	\$ 156,171	\$ 8,031	\$ —	\$ 50,264
Total assets	\$ 2,416,273	\$ 2,024,594	\$ 1,504,383	\$ 2,118,093	\$ 1,951,418
Short-term convertible notes payable	\$ 542,262	\$ —	\$ —	\$ —	\$ —
Long-term convertible notes payable	\$ 800,000	\$ 798,000	\$ 798,000	\$ 1,442,705	\$ 1,442,364
Total liabilities	\$ 1,566,119	\$ 1,025,645	\$ 1,048,545	\$ 1,958,800	\$ 1,937,545
Stockholders’ equity	\$ 850,154	\$ 998,949	\$ 455,838	\$ 159,293	\$ 13,873

Statement of Operations Data:

	Year Ended October 31, (in thousands, except per share data)				
	2007	2008	2009	2010	2011
Revenue	\$ 779,769	\$ 902,448	\$ 652,629	\$ 1,236,636	\$ 1,741,970
Cost of goods sold	417,500	451,521	367,799	739,135	1,032,824
Gross profit	362,269	450,927	284,830	497,501	709,146
Operating expenses:					
Research and development	127,296	175,023	190,319	327,626	379,862
Selling and marketing	118,015	152,018	134,527	193,515	251,990
General and administrative	50,248	68,639	47,509	102,692	126,242
Acquisition and integration costs	—	—	—	101,379	42,088
Amortization of intangible assets	25,350	32,264	24,826	99,401	69,665
Restructuring (recoveries) costs	(2,435)	1,110	11,207	8,514	5,781
Goodwill impairment	—	—	455,673	—	—
Gain on lease settlement	(4,871)	—	—	—	—
Change in fair value of contingent consideration	—	—	—	(13,807)	(3,289)
Total operating expenses	313,603	429,054	864,061	819,320	872,339
Income (loss) from operations	48,666	21,873	(579,231)	(321,819)	(163,193)
Interest and other income, net	76,483	36,762	9,487	3,917	6,022
Interest expense	(26,996)	(12,927)	(7,406)	(18,619)	(37,926)
Realized loss due to impairment of marketable debt investments	(13,013)	(5,101)	—	—	—
Gain (loss) on cost method investments	—	—	(5,328)	—	7,249
Gain on extinguishment of debt	—	932	—	4,948	—
Gain on equity investments, net	592	—	—	—	—
Income (loss) before income taxes	85,732	41,539	(582,478)	(331,573)	(187,848)
Provision (benefit) for income taxes	2,944	2,645	(1,324)	1,941	7,673
Net income (loss)	\$ 82,788	\$ 38,894	\$ (581,154)	\$ (333,514)	\$ (195,521)
Basic net income (loss) per common share	\$ 0.97	\$ 0.44	\$ (6.37)	\$ (3.58)	\$ (2.04)
Diluted net income (loss) per potential common share	\$ 0.87	\$ 0.42	\$ (6.37)	\$ (3.58)	\$ (2.04)
Weighted average basic common shares outstanding	85,525	89,146	91,167	93,103	95,854
Weighted average dilutive potential common shares outstanding	99,604	110,605	91,167	93,103	95,854

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

This report contains statements that discuss future events or expectations, projections of results of operations or financial condition, changes in the markets for our products and services, or other "forward-looking" information. Our "forward-looking" information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these "forward-looking statements" by words like "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential" or "continue" or the negative of those words and other comparable words. You should be aware that these statements only reflect our current predictions and beliefs. These statements are subject to known and unknown risks, uncertainties and other factors, and actual events or results may differ materially. Important factors that could cause our actual results to be materially different from the forward-looking statements are disclosed throughout this report, particularly under the heading "Risk Factors" in Item 1A of Part I of this annual report. You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. We undertake no obligation to revise or update any forward-looking statements. The following discussion and analysis should be read in conjunction with our "Selected Consolidated Financial Data" and consolidated financial statements and notes thereto included elsewhere in this annual report.

Overview

We are a provider of equipment, software and service solutions that support the transport, switching, aggregation and management of voice, video and data traffic on communications networks. Our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products are deployed and used, individually or as part of an integrated solution, in communications networks operated by service providers, cable operators, governments, enterprises and other network operators around the globe.

We are a network specialist focused on the modernization and transition of disparate, legacy network infrastructures to converged, next-generation architectures, optimized to handle a broader mix of high-bandwidth communications services. Our product portfolio consists of our Packet-Optical Transport, Packet-Optical Switching and Carrier Ethernet Solutions products that enable network operators to scale capacity and increase transmission speeds, transport and efficiently allocate network traffic, and deliver services to business and consumer end users. Our network solutions also include our Ciena One software suite for unified network management and network planning and design, as well as a broad offering of advanced network consulting, design, implementation and support services.

Our customers face a challenging and rapidly changing environment that requires their networks to be robust enough to address increasing capacity needs and flexible enough to quickly adapt to emerging applications and evolving consumer and business use of communications services. Our solutions seek to enable software-defined, automated, next-generation networks that better address the business challenges, infrastructure requirements and service delivery needs of our customers. By improving network productivity and automation, reducing network costs and enabling rapid deployment of differentiated service offerings, our communications networking solutions create business and operational value for our customers.

Our quarterly reports on Form 10-Q, annual reports on Form 10-K and current reports on Form 8-K filed with the SEC are available through the SEC's website at www.sec.gov or free of charge on our website as soon as reasonably practicable after we file these documents. We routinely post the reports above, recent news and announcements, financial results and other important information about Ciena on the "Investors" page of our website at www.ciena.com.

Global Market Conditions and Competitive Landscape

The sustained period of macroeconomic weakness and volatility in the global economy and in capital markets has resulted in heightened uncertainty and cautious customer behavior in our industry and markets. These dynamics have caused increased customer scrutiny with respect to network investment, which has resulted in protracted sales cycles, lengthier network deployments, revenue recognition delays and extended collection cycles, particularly for international network projects. Broad

macroeconomic weakness has previously resulted in periods of decreased demand for our products and services that have adversely affected our results of operations. We remain uncertain as to how long current macroeconomic and industry conditions will persist, the pace of any recovery, and the magnitude of the effect of these conditions on the growth of our markets and business, as well as our results of operations.

We continue to encounter a highly competitive marketplace for sales of our networking solutions offering, particularly within our Packet-Optical Transport segment. Competition has intensified as we and our competitors have introduced new, high-capacity, high-speed network solutions and more aggressively sought to capture market share and displace incumbent vendors at large carrier customers. We have also encountered increased competition as we have expanded our business in emerging geographies and new markets or applications for our communications networking products. For example, we have made early progress in the sale of our products for application in submarine networks and with sales to customers in the Middle East. In this competitive environment, securing new opportunities, particularly in international markets, often requires that we agree to less favorable commercial terms or pricing, financial commitments requiring collateralized performance bonds or similar instruments that place cash resources at risk, and other contractual commitments that place a disproportionate allocation of risk upon the vendor. These terms can adversely affect our result of operations. We expect the level of competition, particularly in North America, to continue and potentially increase, as Chinese equipment vendors seek to gain entry into the U.S. market, and other multinational competitors seek to retain incumbent positions with large customers in the region.

Potential Supply Chain Disruption

In recent months, several regions of Thailand have experienced severe flooding, causing significant damage to infrastructure and factories. Flooding has affected the operations of certain component providers in our supply chain, or, in turn, their suppliers of components based in Thailand. We are actively monitoring and evaluating stabilization efforts of these suppliers following the flooding and are currently working with existing suppliers and qualifying new sources of supply in order to minimize the effect on our customers and our business. Given the severity of the situation and our dependency upon the recovery efforts of these suppliers, however, there can be no assurance that we will not encounter shortages, extended lead times, additional costs or other disruptions in the availability or allocation of components that could affect our business over the next several fiscal quarters.

Market Opportunity and Strategy

Despite recent macroeconomic and competitive dynamics, we believe that a number of important underlying drivers represent significant long-term opportunities and growing demand for converged optical Ethernet networking solutions in our target markets. We believe that market trends, including the proliferation of smartphones, tablets and similar devices running mobile web applications, the prevalence of video applications, and the shift of enterprise and consumer applications to cloud-based or virtualized network environments are emblematic of increased use and dependence by consumers and enterprises upon a growing variety of broadband applications and services. We expect that these services will continue to add significant multiservice network traffic, requiring our customers to invest in next-generation, high-capacity network infrastructures that are more efficient, robust and dynamic.

To capitalize on the market dynamics above, we invested heavily in our business during fiscal 2011 and are in the process of introducing, or transitioning to new solutions offerings in each of our product segments. Simultaneously, we have been investing in market entry into multiple new geographies and customer segments, as well as the expansion of footprint and market share within our traditional customer base across our segments. We have also been making investments in an effort to optimize and gain leverage from our business processes, systems, infrastructure and resources in order to achieve our desired operating model and profitability goals. These investments are a critical element of our effort to address customer business challenges and evolving network requirements and position us to seize market opportunities. We believe these investments, together with the successful completion of significant integration activities relating to the MEN Business during fiscal 2011, lay a strong foundation for long-term growth of our business.

Additional components of our overall corporate strategy can be found in Item 1, "Business" above.

Acquisition of Nortel Metro Ethernet Networks Business and Effect on Results of Operations and Financial Condition

On March 19, 2010, we completed our acquisition (the "MEN Acquisition") of substantially all of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks business (the "MEN Business") for a purchase price of \$676.8 million. See Note 2 to the Consolidated Financial Statements in Item 8 of Part II of this annual report for more information.

The MEN Acquisition represented a transformative opportunity for Ciena, strengthening our position as a leader in next-

generation, converged optical Ethernet networking and accelerating the execution of our corporate and research and development strategies. Due to the relative scale of its operations, however, the MEN Acquisition materially affected our operations, financial results and liquidity during the periods covered in this report and may make period to period comparisons difficult. These effects include:

- In fiscal 2010, we paid the \$676.8 million purchase price for the MEN Acquisition in cash and issued \$375.0 million in aggregate principal amount of 4.0% convertible senior notes due March 15, 2015, in part to fund the purchase price;
- Our revenue increased materially as compared to periods prior to the MEN Acquisition, which closed during our second quarter of fiscal 2010;
- Our concentration of Packet-Optical Transport revenue and revenue from outside of the United States increased, each of which has contributed to somewhat lower gross margins since the MEN Acquisition;
- Gross margin was adversely affected by the valuation, required under accounting rules, of the acquired finished goods inventory of the MEN Business to fair value upon closing. This valuation increased marketable inventory carrying value by \$62.3 million, of which \$48.0 million and \$14.3 million were recognized in cost of goods sold during fiscal 2010 and 2011, respectively. See “Critical Accounting Policies and Estimates- Long-lived Assets” and Note 2 of the Consolidated Financial Statements found under Item 8 of Part II of this annual report;
- Our operating expense increased materially compared to periods prior to the MEN Acquisition, reflecting:
 - the addition of approximately 2,000 employees, nearly doubling our headcount;
 - increased operating costs associated with a significantly expanded, global business;
 - increased amortization costs relating to the acquisition of \$492.4 million in intangible assets;
 - transition service expense for services performed by a Nortel affiliate through the second quarter of fiscal 2011, relating to finance and accounting functions, supply chain and logistics management, maintenance and product support, order management and fulfillment, trade compliance, and information technology;
 - integration-related costs, including transaction, consulting and third party service fees, severance and purchases of capitalized information technology equipment of \$122.3 million and \$59.6 million for fiscal 2010 and 2011, respectively; and
 - restructuring costs during fiscal 2010 and fiscal 2011 of approximately \$8.5 million and \$6.6 million, respectively, largely related to our efforts to better align our workforce and operating costs with the market opportunities, product development initiatives and business strategies for the combined operations.
- Increased use of cash from operations primarily driven by greater working capital requirements in fiscal 2010 and 2011.

In reviewing our financial results, investors should consider these and other factors included to highlight challenges to period to period comparisons.

Financial Results

Revenue for the fourth quarter of fiscal 2011 was \$455.5 million, representing a sequential increase of 4.6% from \$435.3 million in the third quarter of fiscal 2011. Revenue-related details reflecting sequential changes from the third quarter of fiscal 2011 include:

- Product revenue for the fourth quarter of fiscal 2011 increased by \$18.0 million, primarily reflecting an increase of \$29.6 million in Packet-Optical Transport and a decrease of \$11.6 million in sales of Carrier-Ethernet Solutions.
- Service revenue for the fourth quarter of fiscal 2011 increased by \$2.1 million.
- Revenue from the United States for the fourth quarter of fiscal 2011 was \$252.2 million, an increase from \$227.5 million in the third quarter of fiscal 2011.
- International revenue for the fourth quarter of fiscal 2011 was \$203.3 million, a decrease from \$207.8 million in the third quarter of fiscal 2011.
- As a percentage of revenue, international revenue was 44.6% during the fourth quarter of fiscal 2011, a decrease from 47.7% during the third quarter of fiscal 2011.
- For the fourth quarter of fiscal 2011, one customer accounted for greater than 10% of revenue, representing 14.9% of

total revenue. This compares to one customer that accounted for 17.2% of total revenue in the third quarter of fiscal 2011.

Gross margin for the fourth quarter of fiscal 2011 was 41.7%, a decrease from 42.5% in the third quarter of fiscal 2011. Gross margin for the fourth quarter of fiscal 2011 was adversely affected by lower services margin. Gross margin has been, and may continue to be, affected by increased competitive pressures across our segments and our strategy to gain new customers, enter new markets and capture additional market share, particularly for 40G and 100G coherent optical transport solutions within our 6500 Packet-Optical Platform.

Operating expense was \$206.2 million for the fourth quarter of fiscal 2011, an increase from \$202.3 million in the third quarter of fiscal 2011. Fourth quarter operating expense primarily reflects a \$9.3 million increase in selling and marketing expense due to increased variable compensation, travel expense and product demonstration costs. This increase was partially offset by decreases of \$2.5 million in acquisition and integration costs and \$2.0 million in research and development expense.

As a result of our increase in revenue as described above, our loss from operations for the fourth quarter of fiscal 2011 was \$16.3 million, an improvement from a \$17.4 million loss from operations during the third quarter of fiscal 2011. Our net loss for the fourth quarter of fiscal 2011 was \$22.3 million, or \$0.23 per share. This compares to a net loss of \$31.5 million or \$0.33 per share, for the third quarter of fiscal 2011.

We generated \$42.0 million in cash from operations during the fourth quarter of fiscal 2011, consisting of \$32.9 million provided by net losses adjusted for non-cash charges and \$9.1 million in changes in working capital. This compares with the use of \$17.0 million in cash from operations during the third quarter of fiscal 2011, consisting of \$44.3 million in cash used for changes in working capital and \$27.3 million from net losses adjusted for non-cash charges.

As of October 31, 2011, we had \$541.9 million in cash and cash equivalents and \$50.3 million of long-term investments in U.S. treasury securities. This compares to \$486.3 million and \$688.7 million in cash and cash equivalents at July 31, 2011 and October 31, 2010, respectively, and \$50.2 million of long-term investments in U.S. treasury securities at July 31, 2011.

As of October 31, 2011 and July 31, 2011, headcount was 4,339, an increase from 4,201 and 2,163 at October 31, 2010 and 2009, respectively.

Consolidated Results of Operations

Our results of operations for the periods in fiscal 2010 reflect the operations of the MEN Business beginning on the March 19, 2010 acquisition date. We reorganized our internal organizational structure and the management of our business upon the MEN Acquisition and, as described in Note 19 of the Consolidated Financial Statements found under Item 8 of Part II of this report, present our results of operations based upon the following operating segments:

- *Packet-Optical Transport* - includes optical transport solutions that increase network capacity and enable more rapid delivery of a broader mix of high-bandwidth services. These products are used by network operators to facilitate the cost effective and efficient transport of voice, video and data traffic in core networks, regional, metro and access networks. Our Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Our principal products in this segment include the 6500 Packet-Optical Platform, 4200 Advanced Services Platform; Corestream® Agility Optical Transport System, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL), and 6100 Multiservice Optical Platform. This segment also includes sales from legacy SONET/SDH, transport and data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. This segment also includes operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Packet-Optical Switching* - includes optical switching platforms that enable automated optical infrastructures for the delivery of a wide variety of enterprise and consumer-oriented network services. Our principal products in this segment include our family of CoreDirector® Multiservice Optical Switches, our 5430 Reconfigurable Switching System and our OTN configuration for the 5410 Reconfigurable Switching System. These products include multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both the core and metro segments of communications networks and support key managed service services, Ethernet/TDM Private Line, Triple Play and IP services. This segment also includes sales of operating system software and enhanced

software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.

- *Carrier-Ethernet Solutions* - includes our 3000 family of service delivery switches and service aggregation switches, the 5000 series of service aggregation switches, and our Carrier Ethernet packet configuration for the 5410 Service Aggregation Switch. These products support the access and aggregation tiers of communications networks and have principally been deployed to support wireless backhaul infrastructures and business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features. This segment includes the legacy metro Ethernet routing switch (MERS) product line from the MEN Business, and our legacy broadband products, including our CNX-5 Broadband DSL System (CNX-5), that transitions legacy voice networks to support Internet-based (IP) telephony, video services and DSL. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Software and Services* - includes the Ciena One software suite, including OneControl, our integrated network and service management software designed to automate and simplify network management, operation and service delivery. These software solutions can track individual services across multiple product suites, facilitating planned network maintenance, outage detection and identification of customers or services affected by network troubles. In addition to Ciena One, this segment includes our ON-Center® Network & Service Management Suite, and the OMEA and Preside platforms from the MEN Business. This segment also includes a broad range of consulting and support services, including installation and deployment, maintenance support, consulting, network design and training activities. Except for revenue from the software portion of this segment, which is included in product revenue, revenue from this segment is included in services revenue on the Consolidated Statement of Operations.

Fiscal 2010 compared to Fiscal 2011

Revenue

The table below (in thousands, except percentage data) sets forth the changes in our operating segment revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Revenue:						
Packet-Optical Transport	\$ 705,551	57.0	\$ 1,121,811	64.5	\$ 416,260	59.0
Packet-Optical Switching	112,058	9.1	148,395	8.5	36,337	32.4
Carrier-Ethernet Solutions	179,083	14.5	127,868	7.3	(51,215)	(28.6)
Software and Services	239,944	19.4	343,896	19.7	103,952	43.3
Consolidated revenue	<u>\$ 1,236,636</u>	<u>100.0</u>	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 505,334</u>	<u>40.9</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Packet-Optical Transport revenue** increased reflecting a \$377.8 million increase in sales of our 6500 Packet-Optical Platform, largely driven by service provider demand for high-capacity, optical transport, including coherent 40G and 100G network infrastructures. Packet-Optical Transport revenue also benefited from sales increases of \$23.4 million in 4200 Advanced Services Platform, \$19.9 million in 6100 Multiservice Optical Platform, \$15.9 million in 5100/5200 Advanced Services Platform, and \$10.2 million in CPL. These increases were partially offset by decreases of \$25.6 million in Corestream® Agility Optical Transport System and \$5.1 million in legacy transport products.
- **Packet-Optical Switching revenue** increased reflecting a \$21.3 million increase in sales of our 5430 Reconfigurable Switching System and a \$14.1 million increase in sales of our CoreDirector® Multiservice Optical Switches. Packet-Optical Switching revenue has historically reflected sales of our CoreDirector platform, which has a concentrated

customer base. Our Packet-Optical Switching segment is in the midst of a platform transition to our next-generation 5430 Reconfigurable Switching System. As a result of these factors, revenue for this segment can fluctuate considerably depending upon individual customer purchasing decisions and the level of initial deployments with customers.

- **Carrier-Ethernet Solutions revenue** decreased reflecting a \$51.6 million decrease in sales of our 3000 and 5000 families of service delivery switches and service aggregation switches and an \$8.7 million decrease in sales of our legacy metro Ethernet and broadband products. Carrier Ethernet Service Delivery revenue benefited from \$9.1 million in initial revenue from the introduction of the 5410 Service Aggregation Switch to support wireless backhaul, Ethernet business services and residential broadband applications. Revenue for this segment remains subject to fluctuation due to customer concentration and the timing of customer purchasing and deployment cycles. We expect segment results to be dependent upon further adoption of these products to support business Ethernet service applications and the level of customer adoption of our high-capacity, Carrier Ethernet configuration for our 5410 Service Aggregation Switch to support wireless backhaul, Ethernet business services and residential broadband applications.
- **Software and Services revenue** increased reflecting a \$66.1 million increase in maintenance support revenue and a \$42.0 million increase in installation, deployment and consulting services.

Revenue from sales to customers outside of the United States is reflected as International in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
United States	\$ 744,232	60.2	\$ 930,880	53.4	\$ 186,648	25.1
International	492,404	39.8	811,090	46.6	318,686	64.7
Total	<u>\$ 1,236,636</u>	<u>100.0</u>	<u>\$ 1,741,970</u>	<u>100.0</u>	<u>\$ 505,334</u>	<u>40.9</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **United States revenue** increased primarily due to a \$185.2 million increase in sales of Packet-Optical Transport products, a \$38.3 million increase in Software and Services revenue and a \$17.4 million increase in Packet-Optical Switching products. These increases were partially offset by a \$54.2 million decrease in Carrier Ethernet Solutions sales.
- **International revenue** increased primarily due to a \$231.1 million increase in Packet-Optical Transport revenue, a \$65.7 million increase in Software and Services revenue and an \$18.9 million increase in sales of Packet-Optical Switching products.

A sizable portion of our revenue continues to come from sales to a small number of service providers, particularly within our Packet-Optical Switching and Carrier-Ethernet Solutions businesses where four customers accounted for greater than approximately 65.8% of our revenue in fiscal 2011. As a result, our financial results are significantly affected by spending levels and the business opportunities and challenges encountered by our service provider customers. Moreover, our contracts do not have terms that obligate these customers to purchase any minimum or specific amounts of equipment or services. Our concentration of revenue has been adversely affected in prior periods by consolidation activity among our customers. In addition, some of our customers are pursuing efforts to outsource the management and operation of their networks, or have indicated a procurement strategy to reduce the number of vendors from which they purchase equipment, which could further affect our concentration of revenue where we participate in these efforts. Sales to AT&T were \$267.4 million, or 21.6% of our revenue, in fiscal 2010 and \$269.9 million, or 15.5% of our revenue, in fiscal 2011. We did not have any other customers accounting for greater than 10% of revenue in fiscal 2010 or 2011.

Cost of Goods Sold and Gross Profit

Product cost of goods sold consists primarily of amounts paid to third-party contract manufacturers, component costs, employee-related costs and overhead, shipping and logistics costs associated with manufacturing-related operations, warranty

and other contractual obligations, royalties, license fees, amortization of intangible assets, cost of excess and obsolete inventory and, when applicable, estimated losses on committed customer contracts.

Services cost of goods sold consists primarily of direct and third-party costs, including employee-related costs, associated with our provision of services including installation, deployment, maintenance support, consulting and training activities, and, when applicable, estimated losses on committed customer contracts.

Our gross profit as a percentage of revenue, or “gross margin,” continues to be susceptible to quarterly fluctuation due to a number of factors. Gross margin can vary significantly depending upon the mix and concentration of revenue by segment or product line, the concentration of lower margin common equipment sales within a segment or product line, geographic mix and the mix of customers and services in a given fiscal quarter. Gross margin can also be affected by our introduction of new products, charges for excess and obsolete inventory, changes in warranty costs and sales volume. We expect that gross margins will be subject to fluctuation based on our level of success in driving cost reductions, rationalizing our supply chain and consolidating third party contract manufacturers and distribution sites as part of our effort to optimize our operations. Gross margin can also be adversely affected by the competitive environment and level of pricing pressure we encounter. The combination of the recent period of uncertain market conditions, constraints on customer capital expenditures and increased competition has resulted in a heightened customer focus on pricing and return on network investment, as customers address network traffic growth and strive to increase revenue and profit. While competition is intense across our segments, our exposure to pricing pressure has been most severe in metro and core applications for our Packet-Optical Transport platforms, particularly in international markets. As a result, in an effort to retain or secure customers, enter new markets or capture market share, in the past we have and in the future we may agree to pricing or other unfavorable commercial terms that result in lower or negative gross margins on a particular order or group of orders. Because Packet-Optical Transport and international revenue comprise a greater percentage of our overall revenue than in prior periods, these market dynamics may adversely affect our gross margins and results of operations in certain periods.

Service gross margin can be affected by the mix of customers and services, particularly the mix between deployment and maintenance services, geographic mix and the timing and extent of any investments in internal resources to support this business.

The tables below (in thousands, except percentage data) set forth the changes in revenue, cost of goods sold and gross profit for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Total revenue	\$ 1,236,636	100.0	\$ 1,741,970	100.0	\$ 505,334	40.9
Total cost of goods sold	739,135	59.8	1,032,824	59.3	293,689	39.7
Gross profit	<u>\$ 497,501</u>	<u>40.2</u>	<u>\$ 709,146</u>	<u>40.7</u>	<u>\$ 211,645</u>	<u>42.5</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Product revenue	\$ 1,009,239	100.0	\$ 1,406,532	100.0	\$ 397,293	39.4
Product cost of goods sold	596,704	59.1	825,969	58.7	229,265	38.4
Product gross profit	<u>\$ 412,535</u>	<u>40.9</u>	<u>\$ 580,563</u>	<u>41.3</u>	<u>\$ 168,028</u>	<u>40.7</u>

* Denotes % of product revenue

** Denotes % change from 2010 to 2011

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Service revenue	\$ 227,397	100.0	\$ 335,438	100.0	\$ 108,041	47.5
Service cost of goods sold	142,431	62.6	206,855	61.7	64,424	45.2
Service gross profit	<u>\$ 84,966</u>	<u>37.4</u>	<u>\$ 128,583</u>	<u>38.3</u>	<u>\$ 43,617</u>	<u>51.3</u>

* Denotes % of service revenue

** Denotes % change from 2010 to 2011

- **Gross profit as a percentage of revenue** increased as a result of the factors described below.
- **Gross profit on products as a percentage of product revenue** increased, despite less favorable product mix in fiscal 2011, largely as a result of the adverse effect, in fiscal 2010, of a number of items relating to the MEN Acquisition that increased costs of goods sold in that period. These items included \$48.0 million related to the revaluation of inventory and \$6.6 million in excess purchase commitment losses on Ciena's pre-acquisition inventory relating to product rationalization decisions. Fiscal 2011 cost of goods sold included \$14.3 million related to the revaluation of inventory and an \$8.8 million increase in amortization of intangible assets.
- **Gross profit on services as a percentage of services revenue** increased due to higher concentration of professional services as a percentage of revenue, and improved operational efficiencies.

Operating Expense

Research and development expense primarily consists of salaries and related employee expense (including share-based compensation expense), prototype costs relating to design, development, and testing of our products, depreciation expense and third-party consulting costs.

Sales and marketing expense primarily consists of salaries, commissions and related employee expense (including share-based compensation expense), and sales and marketing support expense, including travel, demonstration units, trade show expense and third-party consulting costs.

General and administrative expense primarily consists of salaries and related employee expense (including share-based compensation expense), and costs for third-party consulting and other services.

Amortization of intangible assets primarily reflects purchased technology and customer relationships from our acquisitions.

The table below (in thousands, except percentage data) sets forth the changes in operating expense for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Research and development	\$ 327,626	26.5	\$ 379,862	21.8	\$ 52,236	15.9
Selling and marketing	193,515	15.6	251,990	14.5	58,475	30.2
General and administrative	102,692	8.3	126,242	7.2	23,550	22.9
Acquisition and integration costs	101,379	8.2	42,088	2.4	(59,291)	(58.5)
Amortization of intangible assets	99,401	8.0	69,665	4.0	(29,736)	(29.9)
Restructuring costs	8,514	0.7	5,781	0.3	(2,733)	(32.1)
Change in fair value of contingent consideration	(13,807)	(1.1)	(3,289)	(0.2)	10,518	(76.2)
Total operating expenses	<u>\$ 819,320</u>	<u>66.2</u>	<u>\$ 872,339</u>	<u>50.0</u>	<u>\$ 53,019</u>	<u>6.5</u>

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Research and development expense** was adversely affected by \$12.2 million as a result of foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The \$52.2 million increase primarily reflects increases of \$47.4 million in employee compensation and related costs, \$13.6 million in facilities and information systems, \$4.8 million in depreciation expense and \$2.5 million in professional services and fees. These increases were partially offset by decreases of \$9.6 million in prototype expense and a \$5.5 million benefit related to a conditional grant from the Province of Ontario. Under this strategic jobs investment fund grant, we can receive up to an aggregate of \$25.0 million Canadian dollars in funding for eligible costs relating to certain next-generation, coherent optical transport development initiatives over the period from fiscal 2011 to fiscal 2015. We anticipate receiving future disbursements, approximating CAD\$5.0 million per fiscal year over the period above. Amounts received under the grant are subject to recoupment in the event that we fail to achieve certain minimum investment, employment and project milestones.
- **Selling and marketing expense** was adversely affected by \$2.5 million due to foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Euro and the Canadian dollar. The \$58.5 million increase primarily reflects increases of \$37.9 million in employee compensation and related costs, \$6.0 million in facilities and information systems, \$5.2 million in travel-related expenditures, \$4.8 million in marketing program costs, \$2.7 million in prototype expense and \$2.0 million in professional services and fees.
- **General and administrative expense** increased by \$21.5 million in employee compensation and related costs.
- **Acquisition and integration costs** principally consist of transaction, consulting and third party service fees related to the acquisition and integration of the MEN Business into the combined operations. This integration activity was substantially completed in the first half of fiscal 2011.
- **Amortization of intangible assets** decreased due to certain intangible assets from the MEN Acquisition reaching the end of their economic lives during fiscal 2011. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this report.
- **Restructuring costs** primarily reflect the headcount reductions and restructuring activities described in the “Overview — Acquisition of Nortel Metro Ethernet Networks Business and Effect on Results of Operations and Financial Condition ” above.
- **Change in fair value of contingent consideration** is related to the contingent refund right we received as part of the MEN Acquisition relating to the early termination of the Carling lease. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II for additional information.

Other items

The table below (in thousands, except percentage data) sets forth the changes in other items for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2010	%*	2011	%*		
Interest and other income (loss), net	\$ 3,917	0.3	\$ 6,022	0.3	\$ 2,105	53.7
Interest expense	\$ 18,619	1.5	\$ 37,926	2.2	\$ 19,307	103.7
Gain on cost method investment	\$ —	0.0	\$ 7,249	0.4	\$ 7,249	100.0
Gain on extinguishment of debt	\$ 4,948	0.4	\$ —	0.0	\$ (4,948)	(100.0)
Provision for income taxes	\$ 1,941	0.2	\$ 7,673	0.4	\$ 5,732	295.3

* Denotes % of total revenue

** Denotes % change from 2010 to 2011

- **Interest and other income (loss), net** increased due to a \$2.8 million positive effect of foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency. Fiscal 2010 reflects a \$2.0 million charge relating to the termination of an indemnification asset upon the expiration of the statute of limitations applicable to one of the uncertain tax contingencies acquired as part of the MEN Acquisitions.

- **Interest expense** increased due to our issuance during fiscal 2010 of \$375.0 million in aggregate principal amount of 4.0% convertible senior notes due March 15, 2015 and \$350.0 million in aggregate principal amount of 3.75% convertible senior notes due October 15, 2018. See Note 14 to the Consolidated Financial Statements found under Item 8 of Part II of this report.
- **Gain on cost method investment** for fiscal 2011 was the result of the sale of a privately held technology company in which we held a minority equity investment.
- **Gain on extinguishment of debt** for fiscal 2010 resulted from our repurchase of \$81.8 million in aggregate principal amount of our outstanding 0.25% convertible notes in privately negotiated transactions for \$76.1 million. We recorded a gain on the extinguishment of debt in the amount of \$4.9 million, which consists of the \$5.7 million gain from the repurchase of the notes, less \$0.8 million of associated debt issuance costs.
- **Provision for income taxes** increased primarily due to increased foreign taxes.

Fiscal 2009 compared to Fiscal 2010

Revenue

The table below (in thousands, except percentage data) sets forth the changes in our operating segment revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Revenue:						
Packet-Optical Transport	\$ 299,088	45.8	\$ 705,551	57.0	\$ 406,463	135.9
Packet-Optical Switching	165,705	25.4	112,058	9.1	(53,647)	(32.4)
Carrier-Ethernet Solutions	75,125	11.5	179,083	14.5	103,958	138.4
Software and Services	112,711	17.3	239,944	19.4	127,233	112.9
Consolidated revenue	<u>\$ 652,629</u>	<u>100.0</u>	<u>\$ 1,236,636</u>	<u>100.1</u>	<u>\$ 584,007</u>	<u>89.5</u>

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Packet-Optical Transport revenue** for fiscal 2010 reflects the addition of \$409.6 million in revenue from the MEN Business. The addition of MEN Business revenue reflects \$208.0 million of sales relating to our 6500 Packet-Optical Platform. Packet-Optical Transport revenue also benefited from the addition of sales from the MEN Business of \$115.8 million of 5100/5200 Advanced Services Platform, \$39.1 million of CPL, \$31.7 million of legacy and other transport products and \$15.0 million of 6100 Multiservice Optical Platform revenue. Packet-Optical Transport revenue benefited from a \$13.2 million increase in 4200 Advanced Services Platform revenue during fiscal 2010, largely driven by metro network builds and latency sensitive applications. These increases were offset by an \$11.5 million decrease in Corestream® Agility Optical Transport System sales and a \$4.8 million decrease in sales of legacy and other Packet-Optical Transport products.
- **Packet-Optical Switching revenue** decreased reflecting a \$53.6 million decline in CoreDirector revenue. Packet-Optical Switching revenue principally reflects our CoreDirector platform, which has a concentrated customer base. As a result, revenue can fluctuate considerably depending upon individual customer purchasing decisions. We believe Packet-Optical Switching product revenue was also adversely affected in fiscal 2010 by deferred customer purchasing decisions and the effect of carrier sales cycles as we effected a platform transition from CoreDirector to our 5430 next-generation, high-capacity switching systems.
- **Carrier-Ethernet Solutions revenue** increased significantly, reflecting an \$86.5 million increase in sales of our 3000 and 5000 families of service-delivery switches and service aggregation switches in support of wireless backhaul deployments. Quarterly revenue for these products remains subject to fluctuation due to customer concentration and customer buying cycles. Carrier Ethernet Solutions revenue also benefited from the addition of \$9.6 million in sales of our MERS product from the MEN Business and an \$8.2 million increase in CNX-5 sales in support of residential DSL.
- **Software and Services revenue** increased primarily due to the addition of \$86.6 million in maintenance support

revenue and \$20.8 million in installation and deployment services from the MEN Business. Segment revenue also benefited from a \$14.9 million increase in maintenance support revenue from Ciena's pre-acquisition portfolio and a \$4.9 million increase in software revenue.

Revenue from sales to customers outside of the United States is reflected as International in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
United States	\$ 419,405	64.3	\$ 744,232	60.2	\$ 324,827	77.4
International	233,224	35.7	492,404	39.8	259,180	111.1
Total	<u>\$ 652,629</u>	<u>100.0</u>	<u>\$ 1,236,636</u>	<u>100.0</u>	<u>\$ 584,007</u>	<u>89.5</u>

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **United States revenue** increased primarily due to a \$189.8 million increase in sales of Packet-Optical Transport products, principally as a result of the MEN Acquisition, a \$94.1 million increase in sales of Carrier Ethernet Solutions products, and a \$72.5 million increase in services revenue. These increases offset a \$34.3 million decrease in Packet-Optical Switching revenue.
- **International revenue** increased primarily due to a \$216.7 million increase in Packet-Optical Transport revenue, principally as a result of the MEN Acquisition, a \$49.8 million increase in services revenue and a \$9.9 million increase in sales of Carrier Ethernet Solutions products. These increases offset a \$19.4 million decrease in Packet-Optical Switching revenue.

Cost of Goods Sold and Gross Profit

The tables below (in thousands, except percentage data) set forth the changes in revenue, cost of goods sold and gross profit for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Total revenue	\$ 652,629	100.0	\$ 1,236,636	100.0	\$ 584,007	89.5
Total cost of goods sold	367,799	56.4	739,135	59.8	371,336	101.0
Gross profit	<u>\$ 284,830</u>	<u>43.6</u>	<u>\$ 497,501</u>	<u>40.2</u>	<u>\$ 212,671</u>	<u>74.7</u>

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Product revenue	\$ 547,522	100.0	\$ 1,009,239	100.0	\$ 461,717	84.3
Product cost of goods sold	296,170	54.1	596,704	59.1	300,534	101.5
Product gross profit	<u>\$ 251,352</u>	<u>45.9</u>	<u>\$ 412,535</u>	<u>40.9</u>	<u>\$ 161,183</u>	<u>64.1</u>

* Denotes % of product revenue

** Denotes % change from 2009 to 2010

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Service revenue	\$ 105,107	100.0	\$ 227,397	100.0	\$ 122,290	116.3
Service cost of goods sold	71,629	68.1	142,431	62.6	70,802	98.8
Service gross profit	<u>\$ 33,478</u>	<u>31.9</u>	<u>\$ 84,966</u>	<u>37.4</u>	<u>\$ 51,488</u>	<u>153.8</u>

* Denotes % of service revenue

** Denotes % change from 2009 to 2010

- **Gross profit as a percentage of revenue** decreased due to lower product gross margins described below, partially offset by improved service gross margin.
- **Gross profit on products as a percentage of product revenue** decreased due to a number of items relating to the MEN Acquisition that increased costs of goods sold during fiscal 2010. These items include \$48.0 million related to the revaluation of inventory and \$6.6 million in excess purchase commitment losses on Ciena's pre-acquisition inventory relating to product rationalization decisions and increased amortization of intangible assets. Fiscal 2010 gross profit was also adversely affected by a lower concentration of Packet-Optical Switching revenue. These additional costs were offset by lower warranty and excess and obsolete inventory charges as compared to fiscal 2009. Gross margin for fiscal 2009 was negatively affected by a \$5.8 million charge related to two committed customer sales contracts that resulted in a negative gross margin on the initial phases of the customers' deployment.
- **Gross profit on services as a percentage of services revenue** increased due to higher concentration of maintenance support and professional services as a percentage of revenue, and improved operational efficiencies.

Operating expense

Excluding the effect of the goodwill impairment charges in fiscal 2009, increased operating expense for fiscal 2010 principally reflects the increased scale of our business resulting from the MEN Acquisition on March 19, 2010. The table below (in thousands, except percentage data) sets forth the changes in operating expense for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Research and development	\$ 190,319	29.2	\$ 327,626	26.5	\$ 137,307	72.1
Selling and marketing	134,527	20.6	193,515	15.6	58,988	43.8
General and administrative	47,509	7.3	102,692	8.3	55,183	116.2
Acquisition and integration costs	—	0.0	101,379	8.2	101,379	100.0
Amortization of intangible assets	24,826	3.8	99,401	8.0	74,575	300.4
Restructuring costs	11,207	1.7	8,514	0.7	(2,693)	(24.0)
Goodwill Impairment	455,673	69.8	—	0.0	(455,673)	(100.0)
Change in fair value of contingent consideration	—	0.0	(13,807)	(1.1)	(13,807)	100.0
Total operating expenses	<u>\$ 864,061</u>	<u>132.4</u>	<u>\$ 819,320</u>	<u>66.2</u>	<u>\$ (44,741)</u>	<u>(5.2)</u>

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Research and development expense** was adversely affected by \$13.9 million as a result of foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The \$137.3 million increase primarily reflects increases of \$65.6 million in employee compensation and related costs, \$34.6 million in professional services and fees, \$17.4 million in facilities and information systems, \$12.2 million in depreciation expense and \$4.9 million in prototype expense related to the development initiatives described above.
- **Selling and marketing expense** benefited from \$1.6 million as a result of favorable foreign exchange rates primarily

due to the comparative strength of the U.S. dollar in relation to the previous year. The resulting \$59.0 million net change reflects increases of \$41.8 million in employee compensation and related costs, \$6.4 million in travel-related expenditures, \$4.3 million in facilities and information systems and \$2.8 million in professional services and fees.

- **General and administrative expense** increased by \$21.9 million in consulting service expense, \$17.7 million in facilities and information systems expense and \$11.7 million in employee compensation and related costs.
- **Acquisition and integration costs** principally consist of transaction, consulting and third party service fees related to the integration of the MEN Business into the combined operations.
- **Amortization of intangible assets** increased due to the acquisition of additional intangible assets as a result of the MEN Acquisition. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this report.
- **Restructuring costs** primarily reflect the headcount reductions and restructuring activities described in the “Overview - Acquisition of Nortel Metro Ethernet Networks Business and Effect on Results of Operations and Financial Condition ” above.
- **Goodwill impairment costs** reflect the impairment of goodwill and resulting charge incurred in fiscal 2009 as described in Note 4 to our Consolidated Financial Statements in Item 8 of Part II of this report.
- **Change in fair value of contingent consideration** is related to the contingent refund right we received as part of the MEN Acquisition relating to the early termination of the Carling lease. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II for additional information.

Other items

The table below (in thousands, except percentage data) sets forth the changes in other items for the periods indicated:

	Fiscal Year				Increase (decrease)	%**
	2009	%*	2010	%*		
Interest and other income (loss), net	\$ 9,487	1.5	\$ 3,917	0.3	\$ (5,570)	(58.7)
Interest expense	\$ 7,406	1.1	\$ 18,619	1.5	\$ 11,213	151.4
Loss on cost method investments	\$ 5,328	0.8	\$ —	0.0	\$ (5,328)	(100.0)
Gain on extinguishment of debt	\$ —	0.0	\$ 4,948	0.4	\$ 4,948	100.0
Provision (benefit) for income taxes	\$ (1,324)	(0.2)	\$ 1,941	0.2	\$ 3,265	(246.6)

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Interest and other income (loss), net** decreased as a result of a \$9.5 million decrease in interest income due to lower interest rates and lower invested balances. Decreased interest and other income, net also reflects a \$2.0 million charge relating to the termination of an indemnification asset upon the expiration of the statute of limitations applicable to one of the uncertain tax contingencies acquired as part of the MEN Acquisition. These items were partially offset by a \$3.8 million gain due to the positive effect of foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency, and a \$2.5 million non-cash gain related to the change in fair value of the redemption feature associated with our 4.0% convertible senior notes due March 15, 2015. See Notes 6 and 14 to the Consolidated Financial Statements found under Item 8 of Part II of this report for more information regarding the issuance of these convertible notes and the fair value of the redemption feature contained therein.
- **Interest expense** increased due to our issuance during fiscal 2010 of \$375.0 million in aggregate principal amount of 4.0% convertible senior notes due March 15, 2015 and \$350.0 million in aggregate principal amount of 3.75% convertible senior notes due October 15, 2018. See Note 14 to the Consolidated Financial Statements found under Item 8 of Part II of this report.
- **Loss on cost method investments** during fiscal 2009 was due to the decline in value of our investments in two privately held technology companies that were determined to be other-than-temporary.
- **Gain on extinguishment of debt** resulted from our repurchase of \$81.8 million in aggregate principal amount of our outstanding 0.25% convertible notes in privately negotiated transactions for \$76.1 million. We recorded a gain on the

extinguishment of debt in the amount of \$4.9 million, which consists of the \$5.7 million gain from the repurchase of the notes, less \$0.8 million of associated debt issuance costs.

- **Provision (benefit) for income taxes** increased primarily due to a decrease in refundable federal tax credits.

Segment Profit (Loss)

The table below (in thousands, except percentage data) sets forth the changes in our segment profit (loss) for the respective periods:

	Fiscal Year			
	2010	2011	Increase (decrease)	%*
Segment profit (loss):				
Packet-Optical Transport	\$ 69,319	\$ 191,727	\$ 122,408	176.6
Packet-Optical Switching	\$ 15,662	\$ 49,286	\$ 33,624	214.7
Carrier-Ethernet Solutions	\$ 28,742	\$ 10,849	\$ (17,893)	(62.3)
Software and Services	\$ 56,152	\$ 77,422	\$ 21,270	37.9

* Denotes % change from 2010 to 2011

- **Packet-Optical Transport segment profit** increased primarily due to higher sales volume. Segment profit during fiscal 2010 was adversely affected by the revaluation of the acquired finished goods inventory of the MEN Business to fair value upon closing and the excess purchase commitment losses on Ciena's pre-acquisition inventory relating to product rationalization decisions described above.
- **Packet-Optical Switching segment profit** increased due to higher sales volume and decreased research and development costs, partially offset by lower product gross margin.
- **Carrier-Ethernet Solutions segment profit** decreased due to lower sales volume, partially offset by higher gross margin and decreased research and development costs.
- **Software and Services segment profit** was significantly affected by the MEN Acquisition. Segment profit increased due to increased sales volume, partially offset by increased research and development costs.

The table below (in thousands, except percentage data) sets forth the changes in our segment profit (loss) for the respective periods:

	Fiscal Year			
	2009	2010	Increase (decrease)	%*
Segment profit (loss):				
Packet-Optical Transport	\$ 21,535	\$ 69,319	\$ 47,784	221.9
Packet-Optical Switching	\$ 60,302	\$ 15,662	\$ (44,640)	(74.0)
Carrier-Ethernet Solutions	\$ (9,575)	\$ 28,742	\$ 38,317	(400.2)
Software and Services	\$ 22,249	\$ 56,152	\$ 33,903	152.4

* Denotes % change from 2009 to 2010

- **Packet-Optical Transport segment profit** for fiscal 2010 reflects increased sales volume resulting in additional product gross profit, partially offset by increased research and development costs due to the MEN Acquisition.
- **Packet-Optical Switching segment profit** declined due to decreased sales volume resulting in reduced product gross profit, and increased research and development costs.
- **Carrier-Ethernet Solutions segment profit** improved significantly due to increased sales volume resulting in

additional gross profit, partially offset by increased research and development costs.

- **Software and Services segment profit** improved due to increased sales volume and improved gross margin, both of which resulted in additional gross profit, partially offset by increased research and development costs.

Liquidity and Capital Resources

At October 31, 2011, our principal sources of liquidity were cash and cash equivalents and long-term investments in marketable debt securities, representing U.S. treasuries. The following table summarizes our cash and cash equivalents and long-term investments (in thousands):

	October 31,		Increase (decrease)
	2010	2011	
Cash and cash equivalents	\$ 688,687	\$ 541,896	\$ (146,791)
Long-term investments in marketable debt securities	—	50,264	50,264
Total cash and cash equivalents and investments in marketable debt securities	\$ 688,687	\$ 592,160	\$ (96,527)

During fiscal 2011, we received \$33.5 million related to the early termination of the Carling lease, of which \$17.1 million reduced cash used by operations and \$16.4 million reduced cash used by investing activities. See Note 2 to our Consolidated Financial Statements in Item 8 of Part II for additional information relating to the valuation of this contingent refund right at the closing of the MEN Acquisition and the early termination of the Carling lease.

The decrease in total cash and cash equivalents and investments in marketable debt securities during fiscal 2011, notwithstanding the effect of the receipt of the early termination payment above, was primarily related to the following:

- \$90.5 million cash used from operations, consisting of \$120.3 million for changes in working capital and \$29.8 million from net losses (adjusted for non-cash charges). Use of cash reflects cash payments of \$63.8 million of acquisition and integration-related expense and restructuring costs, of which \$48.7 million was reflected in net losses (adjusted for non-cash charges) and \$15.1 million was reflected in changes in working capital; and
- \$52.4 million for purchases of equipment, furniture, fixtures and intellectual property.

These decreases were partially offset by:

- \$13.2 million from stock issuances upon sales under our employee stock purchase plan and the exercise of stock options;
- \$10.8 million transferred from restricted cash related to reduced collateral requirements for our standby letters of credit described below; and
- \$6.5 million in proceeds from the sale of a privately held technology company in which we had a minority equity investment.

As expected, our investment in working capital for fiscal 2011 reflects the increased scale of our operations resulting from the MEN Acquisition. We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our operating plans and may consider capital raising and other market opportunities that may be available to us. Based on past performance and current expectations, we believe that our cash, cash equivalents and investments will satisfy our working capital needs, capital expenditures, and other liquidity requirements associated with our existing operations through at least the next 12 months.

The following sections set forth the components of our \$90.5 million of cash used by operating activities for fiscal 2011:

Net loss (adjusted for non-cash charges)

The following tables set forth (in thousands) our net loss (adjusted for non-cash charges) during the period:

	Year ended October 31, 2011
Net loss	\$ (195,521)
Adjustments for non-cash charges:	
Amortization of premium on marketable debt securities	(38)
Gain on cost method investments	(7,249)
Change in fair value of embedded redemption feature	(2,800)
Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements	60,154
Share-based compensation costs	37,930
Amortization of intangible assets	95,927
Deferred tax provision	183
Provision for inventory excess and obsolescence	17,334
Provision for warranty	18,451
Other	5,396
Net losses adjusted for non-cash charges	<u>\$ 29,767</u>

Working Capital

Accounts Receivable, Net

Cash used by accounts receivable during fiscal 2011, net of \$1.7 million in provision for doubtful accounts, was \$75.6 million primarily due to increased sales volume. Our days sales outstanding (DSOs) decreased from 100 days for fiscal 2010 to 86 days for fiscal 2011. Our DSOs level for fiscal 2010 largely reflects the timing of the MEN Acquisition and the effect on this calculation of having only a partial year of revenue from the MEN Business.

Utilizing annualized fourth quarter revenue for purposes of this calculation would have resulted in DSOs of 74 days for fiscal 2010 and 83 days for fiscal 2011. Our DSOs increased due to growth in international sales, which generally involve longer payment cycles.

The following table sets forth (in thousands) changes to our accounts receivable, net of allowance for doubtful accounts, from the end of fiscal 2010 through the end of fiscal 2011:

	October 31,		Increase
	2010	2011	(decrease)
Accounts receivable, net	<u>\$ 343,582</u>	<u>\$ 417,509</u>	<u>\$ 73,927</u>

Inventory

Cash generated by inventory during fiscal 2011 was \$14.2 million. Our inventory turns increased from 2.3 turns during fiscal 2010 to 3.6 turns during fiscal 2011. During fiscal 2011, changes in inventory reflect a \$17.3 million reduction related to a non-cash provision for excess and obsolescence. The following table sets forth (in thousands) changes to the components of our inventory from the end of fiscal 2010 through the end fiscal 2011:

	October 31,		Increase (decrease)
	2010	2011	
Raw materials	\$ 30,569	\$ 45,333	\$ 14,764
Work-in-process	6,993	13,851	6,858
Finished goods	177,994	134,998	(42,996)
Deferred cost of goods sold	76,830	67,665	(9,165)
Gross inventory	292,386	261,847	(30,539)
Provision for inventory excess and obsolescence	(30,767)	(31,771)	(1,004)
Inventory	<u>\$ 261,619</u>	<u>\$ 230,076</u>	<u>\$ (31,543)</u>

Prepaid expense and other

Cash used by prepaid expense and other during fiscal 2011 was \$18.3 million. This usage was primarily related to increases in product demonstration units and deferred deployment expense, partially offset by the receipt of the contingent refund receivable related to the Carling Lease termination.

Accounts payable, accruals and other obligations

Cash used by accounts payable, accruals and other obligations during fiscal 2011 was \$59.3 million. Between the end of fiscal 2010 and fiscal 2011, the change in unpaid equipment purchases was \$1.2 million. Changes in accrued liabilities reflect non-cash provisions of \$18.5 million related to warranties. The following table sets forth (in thousands) changes in our accounts payable, accruals and other obligations from the end of fiscal 2010 through the end of fiscal 2011:

	October 31,		Increase (decrease)
	2010	2011	
Accounts payable	\$ 200,617	\$ 157,116	\$ (43,501)
Accrued liabilities	193,994	197,004	3,010
Other long-term obligations	16,435	17,263	828
Accounts payable, accruals and other obligations	<u>\$ 411,046</u>	<u>\$ 371,383</u>	<u>\$ (39,663)</u>

Interest Paid on Convertible Notes

Interest on our outstanding 0.25% convertible senior notes, due May 1, 2013, is payable on May 1 and November 1 of each year. We paid \$0.5 million in interest on these convertible notes during fiscal 2011.

Interest on our outstanding 4.0% convertible senior notes, due March 15, 2015, is payable on March 15 and September 15 of each year. We paid \$15.0 million in interest on these convertible notes during fiscal 2011.

Interest on our outstanding 0.875% convertible senior notes, due June 15, 2017, is payable on June 15 and December 15 of each year. We paid \$4.4 million in interest on these convertible notes during fiscal 2011.

Interest on our outstanding 3.75% convertible senior notes, due October 15, 2018, is payable on April 15 and October 15 of each year. We paid \$13.0 million in interest on these convertible notes during fiscal 2011.

For additional information about our convertible notes, see Note 14 to our Consolidated Financial Statements included in Item 8 of Part II of this report.

Deferred revenue

Deferred revenue increased by \$18.7 million during fiscal 2011. Product deferred revenue represents payments received in advance of shipment and payments received in advance of our ability to recognize revenue. Services deferred revenue is related to payment for service contracts that will be recognized over the contract term. The following table reflects (in thousands) the balance of deferred revenue and the change in this balance from the end of fiscal 2010 through the end of fiscal 2011:

	October 31,		Increase (decrease)
	2010	2011	
Products	\$ 31,187	\$ 42,915	\$ 11,728
Services	73,862	80,883	7,021
Total deferred revenue	<u>\$ 105,049</u>	<u>\$ 123,798</u>	<u>\$ 18,749</u>

Contractual Obligations

During fiscal 2011, we received notice from Nortel of the exercise of its early termination rights under the Carling lease, shortening our lease term from ten years to five years. This had the effect of materially reducing our longer term operating lease commitments in the table below as compared to fiscal 2010. We expect such longer term operating lease commitments to increase at such time that a lease for alternative space is identified. The following is a summary of our future minimum payments under contractual obligations as of October 31, 2011 (in thousands):

	Total	Less than one year	One to three years	Three to five years	Thereafter
Interest due on convertible notes	\$ 171,707	\$ 33,041	\$ 65,541	\$ 42,500	\$ 30,625
Principal due at maturity on convertible notes	1,441,210	—	216,210	375,000	850,000
Operating leases (1)	99,970	30,117	48,585	16,008	5,260
Purchase obligations (2)	235,542	235,542	—	—	—
Total (3) (4)	<u>\$ 1,948,429</u>	<u>\$ 298,700</u>	<u>\$ 330,336</u>	<u>\$ 433,508</u>	<u>\$ 885,885</u>

- (1) The amount for operating leases above does not include insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are variable and are not expected to have a material impact.
- (2) Purchase obligations relate to purchase order commitments to our contract manufacturers and component suppliers for inventory. In certain instances, we are permitted to cancel, reschedule or adjust these orders. Consequently, only a portion of the amount reported above relates to firm, non-cancelable and unconditional obligations.
- (3) As of October 31, 2011, we also had approximately \$8.8 million of other long-term obligations in our Consolidated Balance Sheet for unrecognized tax positions that are not included in this table because the timing or amount of any cash settlement with the respective tax authority cannot be reasonably estimated.
- (4) This table does not reflect the costs associated with our new headquarters lease entered into subsequent to October 31, 2011. See Item 2 of Part I of this annual report for more information.

Some of our commercial commitments, including some of the future minimum payments in operating leases set forth above and certain commitments to customers, are secured by standby letters of credit collateralized by restricted cash. Restricted cash balances are included in other current assets or other long-term assets depending upon the duration of the underlying letter of credit obligation. The following is a summary of our commercial commitments secured by standby letters of credit by commitment expiration date as of October 31, 2011 (in thousands):

	Total	Less than one year	One to three years	Three to five years
Standby letters of credit	<u>\$ 53,543</u>	<u>\$ 24,623</u>	<u>\$ 6,048</u>	<u>\$ 22,872</u>

Off-Balance Sheet Arrangements

We do not engage in any off-balance sheet financing arrangements. In particular, we do not have any equity interests in so-called limited purpose entities, which include special purpose entities (SPEs) and structured finance entities.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expense, and related disclosure of contingent assets and liabilities. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. On an ongoing basis, we reevaluate our

estimates, including those related to bad debts, inventories, intangible assets, income taxes, warranty obligations, restructuring, derivatives and hedging, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Among other things, these estimates form the basis for judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. To the extent that there are material differences between our estimates and actual results, our consolidated financial statements will be affected.

We believe that the following critical accounting policies reflect those areas where significant judgments and estimates are used in the preparation of our consolidated financial statements.

Revenue Recognition

We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price to the buyer is fixed or determinable; and collectibility is reasonably assured. Customer purchase agreements and customer purchase orders are generally used to determine the existence of an arrangement. Shipping documents and evidence of customer acceptance, when applicable, are used to verify delivery or services rendered. We assess whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. We assess collectibility based primarily on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. Revenue for maintenance services is generally deferred and recognized ratably over the period during which the services are to be performed.

We apply the percentage of completion method to long-term arrangements where we are required to undertake significant production, customizations or modification engineering, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, we recognize revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance.

Software revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. In instances where final acceptance criteria of the software is specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

We limit the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or refund privileges.

Accounting for multiple element arrangements entered into prior to fiscal 2011

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, we allocate the arrangement fee among separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence ("VSOE") of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services revenue recognized is affected by our judgment as to whether an arrangement includes multiple elements and, if so, whether VSOE of fair value exists. VSOE is established based on our standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, we require that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Changes to the elements in an arrangement and our ability to establish VSOE for those elements could affect the timing of revenue recognition. For all other multiple element arrangements, we separate the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially in our control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

Accounting for multiple element arrangements entered into or materially modified in fiscal 2011

In October 2009, the Financial Accounting Standards Board, ("FASB") amended the accounting standard for revenue recognition with multiple deliverables which provided guidance on how the arrangement fee should be allocated. The amended

guidance allows the use of management's best estimate of selling price ("BESP") for individual elements of an arrangement when VSOE or third-party evidence ("TPE") is unavailable. Additionally, it eliminates the residual method of revenue recognition in accounting for multiple deliverable arrangements. The FASB also amended the accounting guidance for revenue arrangements with software elements to exclude from the scope of the software revenue recognition guidance, tangible products that contain both software and non-software components that function together to deliver the product's essential functionality.

We adopted the new accounting guidance on a prospective basis for arrangements entered into or materially modified on or after November 1, 2010. Under the new guidance, we separate elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, and delivery of the undelivered element(s) is probable and substantially in our control. Therefore, the new guidance allows for deliverables, for which revenue was previously deferred due to an absence of fair value, to be separated and recognized as revenue as delivered. Also, because the residual method has been eliminated, discounts offered by us are allocated to all deliverables, rather than to the delivered element(s). Our adoption of the new guidance for revenue arrangements changed the accounting for certain products that consist of hardware and software components, in which these components together provided the product's essential functionality. For transactions involving these products entered into prior to fiscal 2011, we recognized revenue based on software revenue recognition guidance.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each element, with revenue recognized when the revenue recognition criteria are met for each delivered element. We determine the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, we use VSOE of selling price, if it exists, or TPE of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, we use our BESP for that deliverable.

VSOE is established based on our standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, which exists across certain of our service offerings, we require that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. We have generally been unable to establish TPE of selling price because our go-to-market strategy differs from that of others in our markets, and the extent of customization and differentiated features and functions varies among comparable products or services from our peers. We determine BESP based upon management-approved pricing guidelines, which consider multiple factors including the type of product or service, gross margin objectives, competitive and market conditions, and the go-to-market strategy; all of which can affect pricing practices.

Historically, for arrangements with multiple elements, we were typically able to establish fair value for undelivered elements and so we applied the residual method. As a result, assuming the adoption of the accounting guidance above on a prospective basis for arrangements entered into or materially modified on or after November 1, 2009, the effect on revenue recognized for fiscal 2010 would have been an increase of approximately \$33.0 million.

We expect that this new accounting guidance will facilitate our efforts to optimize our offerings due to the better alignment between the economics of an arrangement and the accounting. This may lead to engaging in new go-to-market practices in the future. In particular, we expect that the new accounting standards will enable us to better integrate products and services without VSOE into existing offerings and solutions. As these go-to-market strategies evolve, we may modify our pricing practices in the future, which could result in changes in selling prices, including both VSOE and BESP. As a result, our future revenue recognition for multiple-element arrangements could differ materially from the results in the current period. We are currently unable to determine the impact that the newly adopted accounting guidance could have on our revenue as these go-to-market strategies evolve.

Our total deferred revenue for products was \$31.2 million and \$42.9 million as of October 31, 2010 and October 31, 2011, respectively. Our services revenue is deferred and recognized ratably over the period during which the services are to be performed. Our total deferred revenue for services was \$73.9 million and \$80.9 million as of October 31, 2010 and October 31, 2011, respectively.

Business Combinations

We record acquisitions using the purchase method of accounting. All of the assets acquired, liabilities assumed, contractual contingencies and contingent consideration are recognized at their fair value as of the acquisition date. The excess of the purchase price over the estimated fair values of the net tangible and net intangible assets acquired is recorded as goodwill. The application of the purchase method of accounting for business combinations requires management to make significant estimates and assumptions in the determination of the fair value of assets acquired and liabilities assumed in order to properly allocate

purchase price consideration between assets that are depreciated and amortized from goodwill. These assumptions and estimates include a market participant's use of the asset and the appropriate discount rates for a market participant. Our estimates are based on historical experience, information obtained from the management of the acquired companies and, when appropriate, includes assistance from independent third-party appraisal firms. Our significant assumptions and estimates can include, but are not limited to, the cash flows that an asset is expected to generate in the future, the appropriate weighted-average cost of capital, and the cost savings expected to be derived from acquiring an asset. These estimates are inherently uncertain and unpredictable. In addition, unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates. During fiscal 2010, we completed the MEN Acquisition for a purchase price of \$676.8 million. As a result of the purchase price allocation to the assets acquired and liabilities assumed, as well as contingent consideration, there was no value assigned to goodwill. See Note 2 to the Consolidated Financial Statements included in Item 8 of Part II of this report.

Share-Based Compensation

We estimate the fair value of our restricted stock unit awards based on the fair value of our common stock on the date of grant. Our outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. We recognize the estimated fair value of service-based awards, net of estimated forfeitures, as share-based expense ratably over the vesting period on a straight-line basis. Awards with performance-based vesting conditions require the achievement of certain financial or other performance criteria or targets as a condition to the vesting, or acceleration of vesting. We recognize the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon our determination of whether it is probable that the performance targets will be achieved. At each reporting period, we reassess the probability of achieving the performance targets and the performance period required to meet those targets. Determining whether the performance targets will be achieved involves judgment, and the estimate of expense may be revised periodically based on changes in the probability of achieving the performance targets. Revisions are reflected in the period in which the estimate is changed. If any performance goals are not met, no compensation cost is ultimately recognized against that goal, and, to the extent previously recognized, compensation cost is reversed.

Because share-based compensation expense is based on awards that are ultimately expected to vest, the amount of expense takes into account estimated forfeitures. We estimate forfeitures at the time of grant and revise, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Changes in these estimates and assumptions can materially affect the measure of estimated fair value of our share-based compensation. See Note 18 to our Consolidated Financial Statements in Item 8 of Part II of this report for information regarding our assumptions related to share-based compensation and the amount of share-based compensation expense we incurred for the periods covered in this report. As of October 31, 2011, total unrecognized compensation expense was \$59.4 million: (i) \$1.0 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 0.6 year; and (ii) \$58.4 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.6 years.

We recognize windfall tax benefits associated with the exercise of stock options or release of restricted stock units directly to stockholders' equity only when realized. A windfall tax benefit occurs when the actual tax benefit realized by us upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that we had recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, we follow the tax law "with-and-without" method. Under the with-and-without method, the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after considering all other tax benefits including our net operating losses. The with-and-without method results in the windfall from share-based compensation awards always being effectively the last tax benefit to be considered. Consequently, the windfall attributable to share-based compensation will not be considered realized in instances where our net operating loss carryover (that is unrelated to windfalls) is sufficient to offset the current year's taxable income before considering the effects of current-year windfalls.

Reserve for Inventory Obsolescence

We make estimates about future customer demand for our products when establishing the appropriate reserve for excess and obsolete inventory. We write down inventory that has become obsolete or unmarketable by an amount equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. Inventory write downs are a component of our product cost of goods sold. Upon recognition of the write down, a new lower cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. We recorded charges for excess and obsolete inventory of \$13.7 million and \$17.3 million in fiscal 2010 and 2011, respectively. These charges were primarily related to excess inventory due to a change in forecasted sales across our product line. In an effort to limit our exposure to delivery delays and to satisfy customer

needs we purchase inventory based on forecasted sales across our product lines. In addition, part of our research and development strategy is to promote the convergence of similar features and functionalities across our product lines. Each of these practices exposes us to the risk that our customers will not order products for which we have forecasted sales, or will purchase less than we have forecasted. Historically, we have experienced write downs due to changes in strategic direction, discontinuance of a product and declines in market conditions. If actual market conditions worsen or differ from those we have assumed, if there is a sudden and significant decrease in demand for our products, or if there is a higher incidence of inventory obsolescence due to a rapid change in technology, we may be required to take additional inventory write-downs, and our gross margin could be adversely affected. Our inventory net of allowance for excess and obsolescence was \$261.6 million and \$230.1 million as of October 31, 2010 and October 31, 2011, respectively.

Allowance for Doubtful Accounts Receivable

Our allowance for doubtful accounts receivable is based on management's assessment, on a specific identification basis, of the collectibility of customer accounts. We perform ongoing credit evaluations of our customers and generally have not required collateral or other forms of security from customers. In determining the appropriate balance for our allowance for doubtful accounts receivable, management considers each individual customer account receivable in order to determine collectibility. In doing so, we consider creditworthiness, payment history, account activity and communication with such customer. If a customer's financial condition changes, or if actual defaults are higher than our historical experience, we may be required to take a charge for an allowance for doubtful accounts receivable which could have an adverse impact on our results of operations. Our accounts receivable, net of allowance for doubtful accounts, was \$343.6 million and \$417.5 million as of October 31, 2010 and October 31, 2011, respectively. Our allowance for doubtful accounts was \$0.1 million and \$0.7 million as of October 31, 2010 and October 31, 2011, respectively.

Long-lived Assets

Our long-lived assets include: equipment, furniture and fixtures; finite-lived intangible assets; and maintenance spares. As of October 31, 2010 and October 31, 2011 these assets totaled \$600.4 million and \$504.6 million, net, respectively. We test long-lived assets for impairment whenever events or changes in circumstances indicate that the assets' carrying amount is not recoverable from its undiscounted cash flows. Our long-lived assets are assigned to asset groups which represents the lowest level for which we identify cash flows.

Deferred Tax Valuation Allowance

As of October 31, 2011, we have recorded a valuation allowance offsetting nearly all our net deferred tax assets of \$1.5 billion. When measuring the need for a valuation allowance, we assess both positive and negative evidence regarding the realizability of these deferred tax assets. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. In determining net deferred tax assets and valuation allowances, management is required to make judgments and estimates related to projections of profitability, the timing and extent of the utilization of net operating loss carryforwards, applicable tax rates, transfer pricing methodologies and tax planning strategies. The valuation allowance is reviewed quarterly and is maintained until sufficient positive evidence exists to support a reversal. Because evidence such as our operating results during the most recent three-year period is afforded more weight than forecasted results for future periods, our cumulative loss during this three-year period represents sufficient negative evidence regarding the need for nearly a full valuation allowance. We will release this valuation allowance when management determines that it is more likely than not that our deferred tax assets will be realized. Any future release of valuation allowance may be recorded as a tax benefit increasing net income or as an adjustment to paid-in capital, based on tax ordering requirements.

Warranty

Our liability for product warranties, included in other accrued liabilities, was \$54.4 million and \$47.3 million as of October 31, 2010 and October 31, 2011, respectively. Our products are generally covered by a warranty for periods ranging from one to five years. We accrue for warranty costs as part of our cost of goods sold based on associated material costs, technical support labor costs and associated overhead. Material cost is estimated based primarily upon historical trends in the volume of product returns within the warranty period and the cost to repair or replace the equipment. Technical support labor cost is estimated based primarily upon historical trends and the cost to support the customer cases within the warranty period. The provision for product warranties was \$15.4 million and \$18.5 million for fiscal 2010 and 2011, respectively. As a result of the substantial completion of integration activities related to the MEN Acquisition, we consolidated certain support operations and processes during the first quarter of fiscal 2011, resulting in a reduction in costs to service future warranty obligations. Due to this consolidation and resulting efficiencies, we expect to realize lower failure rate costs and accordingly reversed a \$6.9 million non-cash loss contingency included in our warranty liability. The provision for warranty claims may fluctuate on a

quarterly basis depending upon the mix of products and customers in that period. If actual product failure rates, material replacement costs, service or labor costs differ from our estimates, revisions to the estimated warranty provision would be required. An increase in warranty claims or the related costs associated with satisfying these warranty obligations could increase our cost of sales and negatively affect our gross margin.

Effects of Recent Accounting Pronouncements

See Note 1 to our Consolidated Financial Statements in Item 8 of Part II of this report for information relating to our discussion of the effects of recent accounting pronouncements.

Unaudited Quarterly Results of Operations

The tables below (in thousands, except per share data) set forth the operating results in our consolidated statements of operations for each of the eight quarters in the period ended October 31, 2011 and reflect the impact of our March 19, 2010 acquisition of the MEN Business. This information is unaudited, but in our opinion reflects all adjustments (consisting only of normal recurring adjustments) that we consider necessary for a fair statement of such information in accordance with generally accepted accounting principles. There were no material, retroactive measurement period adjustments related to the MEN Acquisition. The results for any quarter are not necessarily indicative of results for any future period.

	Jan. 31, 2010	Apr. 30, 2010	Jul. 31, 2010	Oct. 31, 2010	Jan. 31, 2011	Apr. 30, 2011	Jul. 31, 2011	Oct. 31, 2011
Revenue:								
Products	\$ 149,054	\$ 206,420	\$ 312,378	\$ 341,387	\$ 352,427	\$ 336,026	\$ 350,030	\$ 368,049
Services	26,822	47,051	77,297	76,227	80,881	81,868	85,283	87,406
Total Revenue	<u>175,876</u>	<u>253,471</u>	<u>389,675</u>	<u>417,614</u>	<u>433,308</u>	<u>417,894</u>	<u>435,313</u>	<u>455,455</u>
Cost of goods sold:								
Products	76,669	118,221	201,559	200,255	214,401	202,665	198,217	210,686
Services	19,047	30,308	44,107	48,969	50,401	49,396	52,199	54,859
Total costs of goods sold	<u>95,716</u>	<u>148,529</u>	<u>245,666</u>	<u>249,224</u>	<u>264,802</u>	<u>252,061</u>	<u>250,416</u>	<u>265,545</u>
Gross profit	<u>80,160</u>	<u>104,942</u>	<u>144,009</u>	<u>168,390</u>	<u>168,506</u>	<u>165,833</u>	<u>184,897</u>	<u>189,910</u>
Operating expenses:								
Research and development	50,033	71,142	100,869	105,582	95,790	99,624	93,216	91,232
Selling and marketing	34,237	45,328	52,127	61,823	57,092	61,768	61,895	71,235
General and administrative	12,763	21,503	32,649	35,777	38,314	32,480	28,172	27,276
Acquisition and integration costs	27,031	39,221	17,033	18,094	24,185	10,741	4,822	2,340
Amortization of intangible assets	5,981	17,121	38,727	37,572	28,784	13,674	13,673	13,534
Restructuring costs	(21)	1,849	2,157	4,529	1,522	3,164	504	591
Change in fair value of contingent consideration	—	—	—	(13,807)	(3,289)	—	—	—
Total operating expenses	<u>130,024</u>	<u>196,164</u>	<u>243,562</u>	<u>249,570</u>	<u>242,398</u>	<u>221,451</u>	<u>202,282</u>	<u>206,208</u>
Loss from operations	<u>(49,864)</u>	<u>(91,222)</u>	<u>(99,553)</u>	<u>(81,180)</u>	<u>(73,892)</u>	<u>(55,618)</u>	<u>(17,385)</u>	<u>(16,298)</u>
Interest and other income (loss), net	(773)	3,748	(2,668)	3,610	6,265	4,229	(3,160)	(1,312)
Interest expense	(1,828)	(4,113)	(5,990)	(6,688)	(9,550)	(9,406)	(9,470)	(9,500)
Gain on cost method investment	—	—	—	—	—	—	—	7,249
Gain on extinguishment of debt	—	—	—	4,948	—	—	—	—
Loss before income taxes	<u>(52,465)</u>	<u>(91,587)</u>	<u>(108,211)</u>	<u>(79,310)</u>	<u>(77,177)</u>	<u>(60,795)</u>	<u>(30,015)</u>	<u>(19,861)</u>
Provision (benefit) for income tax	868	(1,578)	1,644	1,007	1,879	1,891	1,435	2,468
Net loss	<u>\$ (53,333)</u>	<u>\$ (90,009)</u>	<u>\$ (109,855)</u>	<u>\$ (80,317)</u>	<u>\$ (79,056)</u>	<u>\$ (62,686)</u>	<u>\$ (31,450)</u>	<u>\$ (22,329)</u>
Basic net loss per common share	<u>\$ (0.58)</u>	<u>\$ (0.97)</u>	<u>\$ (1.18)</u>	<u>\$ (0.86)</u>	<u>\$ (0.84)</u>	<u>\$ (0.66)</u>	<u>\$ (0.33)</u>	<u>\$ (0.23)</u>
Diluted net loss per potential common share	<u>\$ (0.58)</u>	<u>\$ (0.97)</u>	<u>\$ (1.18)</u>	<u>\$ (0.86)</u>	<u>\$ (0.84)</u>	<u>\$ (0.66)</u>	<u>\$ (0.33)</u>	<u>\$ (0.23)</u>
Weighted average basic common shares outstanding	<u>92,321</u>	<u>92,614</u>	<u>92,906</u>	<u>93,197</u>	<u>94,496</u>	<u>95,360</u>	<u>96,313</u>	<u>97,197</u>
Weighted average dilutive potential common shares outstanding	<u>92,321</u>	<u>92,614</u>	<u>92,906</u>	<u>93,197</u>	<u>94,496</u>	<u>95,360</u>	<u>96,313</u>	<u>97,197</u>

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The following discussion about our market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates.

Interest Rate Sensitivity. We currently hold an investment in a U.S. Government obligation that matures in January 2013. See Notes 5 and 6 to our Consolidated Financial Statements for information relating to investments and fair value. This investment is sensitive to interest rate movements and its fair value will decline as interest rates rise and increase as interest rates decline. The estimated impact on this investment of a 100 basis point (1.0%) increase in interest rates across the yield curve from rates in effect as of the balance sheet date would be a \$0.6 million decline in value.

Foreign Currency Exchange Risk. As a global concern, our business and results of operations are exposed to movements in foreign currency exchange rates. Historically, our sales have primarily been denominated in U.S. dollars and the impact of foreign currency fluctuations on revenue had not been material. As a result of our increased global presence, in large part resulting from the MEN Acquisition, a larger percentage of our revenue is non-U.S. dollar denominated with Canadian Dollars and Euros being our most significant foreign currency revenue streams. If the U.S. dollar strengthens against these currencies, our revenues reported in U.S. dollars would decline. For our U.S. dollar denominated sales, an increase in the value of the U.S. dollar would increase the real cost to our customers of our products in markets outside the United States which could impact our competitive position.

With regard to operating expense, our primary exposure to foreign currency exchange risk relates to operating expense incurred in Canadian Dollars, British Pounds, Euros and Indian Rupees. During fiscal 2011, approximately 54.0% of our operating expense was non-U.S. dollar denominated. If these currencies strengthen, costs reported in U.S. dollars will increase, which would increase our expenses. During fiscal 2011, research and development expense was adversely affected by approximately \$12.2 million, net of hedging, due to the weakening of the U.S. dollar in relation to the Canadian Dollar in comparison to fiscal 2010.

From time to time, we use foreign currency forward contracts to reduce part of the variability in certain forecasted non-U.S. dollar denominated cash flows. Generally, these derivatives are for maturities of 12 months or less and are designated as cash flow hedges. We consider several factors when evaluating hedges of our forecasted foreign currency exposures, such as significance of the exposure, offsetting economic exposures, potential costs of hedging, and the potential for hedge ineffectiveness. We do not enter into derivative transactions for purposes other than hedging economic exposures. During fiscal 2011, we entered into forward contracts to reduce the variability in our Canadian Dollar and Indian Rupee denominated operating expenses which principally relate to our research and development activities.

Convertible Debt Outstanding. The fair market value of each of our outstanding issues of convertible notes is subject to interest rate and market price risk due to the convertible feature of the notes and other factors. Generally the fair market value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. The fair market value of the notes may also increase as the market price of our stock rises and decrease as the market price of the stock falls. Interest rate and market value changes affect the fair market value of the notes, and may affect the prices at which we would be able to repurchase such notes were we to do so. These changes do not impact our financial position, cash flows or results of operations. For additional information on the fair value of our outstanding notes, see Note 14 to our Consolidated Financial Statements included in Item 8 of Part II of this report.

Item 8. Financial Statements and Supplementary Data

The following is an index to the consolidated financial statements:

	Page Number
Report of Independent Registered Public Accounting Firm	59
Consolidated Balance Sheets	60
Consolidated Statements of Operations	61
Consolidated Statements of Changes in Stockholders' Equity	62
Consolidated Statements of Cash Flows	63
Notes to Consolidated Financial Statements	64

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Ciena Corporation

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Ciena Corporation and its subsidiaries (the “Company”) at October 31, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended October 31, 2011 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 31, 2011, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the Report of Management on Internal Control Over Financial Reporting under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company’s internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for business combinations in fiscal 2010 and revenue in fiscal 2011.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
Baltimore, Maryland
December 22, 2011

CIENA CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	October 31,	
	2010	2011
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 688,687	\$ 541,896
Accounts receivable, net	343,582	417,509
Inventories	261,619	230,076
Prepaid expenses and other	147,680	143,357
Total current assets	1,441,568	1,332,838
Long-term investments	—	50,264
Equipment, furniture and fixtures, net	120,294	122,558
Intangible assets, net	426,412	331,635
Other long-term assets	129,819	114,123
Total assets	<u>\$ 2,118,093</u>	<u>\$ 1,951,418</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 200,617	\$ 157,116
Accrued liabilities	193,994	197,004
Deferred revenue	75,334	99,373
Total current liabilities	469,945	453,493
Long-term deferred revenue	29,715	24,425
Other long-term obligations	16,435	17,263
Convertible notes payable	1,442,705	1,442,364
Total liabilities	1,958,800	1,937,545
Commitments and contingencies		
Stockholders' equity:		
Preferred stock — par value \$0.01; 20,000,000 shares authorized; zero shares issued and outstanding	—	—
Common stock — par value \$0.01; 290,000,000 shares authorized; 94,060,300 and 97,440,436 shares issued and outstanding	941	974
Additional paid-in capital	5,702,137	5,753,236
Accumulated other comprehensive income	1,062	31
Accumulated deficit	(5,544,847)	(5,740,368)
Total stockholders' equity	159,293	13,873
Total liabilities and stockholders' equity	<u>\$ 2,118,093</u>	<u>\$ 1,951,418</u>

The accompanying notes are an integral part of these consolidated financial statements.

CIENA CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended October 31,		
	2009	2010	2011
Revenue:			
Products	\$ 547,522	\$ 1,009,239	\$ 1,406,532
Services	105,107	227,397	335,438
Total revenue	<u>652,629</u>	<u>1,236,636</u>	<u>1,741,970</u>
Cost of goods sold:			
Products	296,170	596,704	825,969
Services	71,629	142,431	206,855
Total cost of goods sold	<u>367,799</u>	<u>739,135</u>	<u>1,032,824</u>
Gross profit	<u>284,830</u>	<u>497,501</u>	<u>709,146</u>
Operating expenses:			
Research and development	190,319	327,626	379,862
Selling and marketing	134,527	193,515	251,990
General and administrative	47,509	102,692	126,242
Acquisition and integration costs	—	101,379	42,088
Amortization of intangible assets	24,826	99,401	69,665
Restructuring costs	11,207	8,514	5,781
Goodwill impairment	455,673	—	—
Change in fair value of contingent consideration	—	(13,807)	(3,289)
Total operating expenses	<u>864,061</u>	<u>819,320</u>	<u>872,339</u>
Loss from operations	<u>(579,231)</u>	<u>(321,819)</u>	<u>(163,193)</u>
Interest and other income (loss), net	9,487	3,917	6,022
Interest expense	(7,406)	(18,619)	(37,926)
Gain (loss) on cost method investments	(5,328)	—	7,249
Gain on extinguishment of debt	—	4,948	—
Loss before income taxes	<u>(582,478)</u>	<u>(331,573)</u>	<u>(187,848)</u>
Provision (benefit) for income taxes	<u>(1,324)</u>	<u>1,941</u>	<u>7,673</u>
Net loss	<u>\$ (581,154)</u>	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>
Basic net loss per common share	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>
Diluted net loss per potential common share	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>
Weighted average basic common shares outstanding	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>
Weighted average dilutive potential common shares outstanding	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
Balance at October 31, 2008	90,470,803	\$ 905	\$ 5,629,498	\$ (1,275)	\$ (4,630,179)	\$ 998,949
Net loss	—	—	—	—	(581,154)	(581,154)
Changes in unrealized gains and losses on investments, net	—	—	—	1,404	—	1,404
Translation adjustment	—	—	—	1,094	—	1,094
Comprehensive loss	—	—	—	—	—	(578,656)
Exercise of stock options, net	1,567,557	15	1,092	—	—	1,107
Share-based compensation expense	—	—	34,438	—	—	34,438
Balance at October 31, 2009	92,038,360	920	5,665,028	1,223	(5,211,333)	455,838
Net loss	—	—	—	—	(333,514)	(333,514)
Changes in unrealized gains and losses on investments, net	—	—	—	(458)	—	(458)
Translation adjustment	—	—	—	297	—	297
Comprehensive loss	—	—	—	—	—	(333,675)
Exercise of stock options, net	2,021,940	21	1,549	—	—	1,570
Share-based compensation expense	—	—	35,560	—	—	35,560
Balance at October 31, 2010	94,060,300	941	5,702,137	1,062	(5,544,847)	159,293
Net loss	—	—	—	—	(195,521)	(195,521)
Changes in unrealized gains and losses on investments, net	—	—	—	393	—	393
Translation adjustment	—	—	—	(1,424)	—	(1,424)
Comprehensive loss	—	—	—	—	—	(196,552)
Exercise of stock options, net	3,380,136	33	13,169	—	—	13,202
Share-based compensation expense	—	—	37,930	—	—	37,930
Balance at October 31, 2011	97,440,436	974	\$ 5,753,236	\$ 31	\$ (5,740,368)	\$ 13,873

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended October 31,		
	2009	2010	2011
Cash flows from operating activities:			
Net loss	\$ (581,154)	\$ (333,514)	\$ (195,521)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Gain on extinguishment of debt	—	(4,948)	—
Amortization of premium (discount) on marketable debt securities	(907)	574	(38)
Loss (gain) on cost method investments	5,328	—	(7,249)
Change in fair value of embedded redemption feature	—	(2,510)	(2,800)
Change in fair value of contingent consideration	—	(13,807)	—
Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements	21,933	42,789	60,154
Impairment of goodwill	455,673	—	—
Share-based compensation costs	34,438	35,560	37,930
Amortization of intangible assets	31,429	127,018	95,927
Deferred tax provision	(883)	700	183
Provision for inventory excess and obsolescence	15,719	13,696	17,334
Provision for warranty	19,286	15,353	18,451
Other	2,044	2,296	5,396
Changes in assets and liabilities, net of effect of acquisition:			
Accounts receivable	20,097	(218,196)	(75,623)
Inventories	(10,353)	(40,957)	14,209
Prepaid expenses and other	(9,678)	(34,908)	(18,302)
Accounts payable, accruals and other obligations	2,943	180,814	(59,285)
Deferred revenue	1,506	1,030	18,749
Net cash provided by (used in) operating activities	7,421	(229,010)	(90,485)
Cash flows used in investing activities:			
Payments for equipment, furniture, fixtures and intellectual property	(24,114)	(51,207)	(52,367)
Restricted cash	(4,116)	(24,521)	10,751
Purchase of available for sale securities	(1,214,218)	(63,591)	(49,892)
Proceeds from maturities of available for sale securities	645,119	454,141	—
Proceeds from sales of available for sale securities	523,137	179,531	—
Proceeds from sale of cost method investment	—	—	6,544
Acquisition of business, net of cash acquired	—	(693,247)	—
Receipt of contingent consideration related to business acquisition	—	—	16,394
Net cash used in investing activities	(74,192)	(198,894)	(68,570)
Cash flows from financing activities:			
Proceeds from issuance of senior convertible notes payable	—	725,000	—
Repayment of senior convertible notes payable	—	(76,065)	—
Debt issuance costs	—	(20,301)	—
Proceeds from issuance of common stock and warrants	1,107	1,570	13,202
Net cash provided by financing activities	1,107	630,204	13,202
Effect of exchange rate changes on cash and cash equivalents	700	682	(938)
Net increase (decrease) in cash and cash equivalents	(64,964)	202,982	(146,791)
Cash and cash equivalents at beginning of period	550,669	485,705	688,687
Cash and cash equivalents at end of period	\$ 485,705	\$ 688,687	\$ 541,896
Supplemental disclosure of cash flow information			
Cash paid during the period for interest	\$ 4,748	\$ 12,248	\$ 32,931
Cash paid during the period for income taxes, net	\$ 584	\$ 1,705	\$ 3,204
Non-cash investing and financing activities			
Purchase of equipment in accounts payable	\$ 1,481	\$ 5,259	\$ 6,431
Debt issuance costs in accrued liabilities	\$ —	\$ 206	\$ —
Fixed assets purchased under capital leases	\$ —	\$ —	\$ 1,106

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) CIENA CORPORATION AND SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES

Description of Business

Ciena Corporation (“Ciena” or the “Company”) is a provider of communications networking equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic. Ciena’s Packet-Optical Transport, Packet-Optical Switching and Carrier-Ethernet Solutions products are used, individually or as part of an integrated solution, in networks operated by communications service providers, cable operators, governments and enterprises around the globe. Ciena is a network specialist targeting the transition of disparate, legacy communications networks to converged, next-generation architectures, better able to handle increased traffic and deliver more efficiently a broader mix of high-bandwidth communications services. Ciena’s products, along with its embedded, network element software and unified service and transport management, enable service providers to efficiently and cost-effectively deliver critical enterprise and consumer-oriented communication services. Ciena’s principal executive offices are located at 1201 Winterson Road, Linthicum, Maryland 21090.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Ciena and its wholly owned subsidiaries. All material inter-company accounts and transactions have been eliminated in consolidation.

Acquisition of MEN Business (“MEN Acquisition”)

On March 19, 2010, Ciena completed its acquisition of substantially all of the optical and carrier Ethernet assets of Nortel’s Metro Ethernet Networks Business (the “MEN Business”). Additional details regarding this transaction are set forth in Note 2 below.

Business Combinations

During fiscal 2010, Ciena adopted the new FASB guidance on business combinations, which requires the total purchase price to be allocated to the assets acquired and liabilities assumed based on their estimated fair values. The fair values assigned to the assets acquired and liabilities assumed are based on valuations using management’s best estimates and assumptions. The allocation of the purchase price as reflected in the consolidated financial statements is based on the best information available to management at the time the consolidated financial statements are issued.

Fiscal Year

Ciena has a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October in each year (October 31, 2009, October 30, 2010 and October 29, 2011 for the periods reported). For purposes of financial statement presentation, each fiscal year is described as having ended on October 31.

Use of Estimates

The preparation of the financial statements and related disclosures in conformity with accounting principles generally accepted in the United States requires management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are used for purchase accounting, bad debts, valuation of inventories and investments, recoverability of intangible assets, other long-lived assets and goodwill, income taxes, warranty obligations, restructuring liabilities, derivatives, contingencies and litigation. Ciena bases its estimates on historical experience and assumptions that it believes are reasonable. Actual results may differ materially from management’s estimates.

Cash and Cash Equivalents

Ciena considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. Restricted cash collateralizing letters of credit is included in other current assets and other long-term assets depending upon the duration of the restriction.

Investments

Ciena’s investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income. Ciena recognizes losses when it determines that declines in the fair value of its investments, below their cost basis, are other-than-temporary. In determining whether a decline in fair value is

other-than-temporary, Ciena considers various factors including market price (when available), investment ratings, the financial condition and near-term prospects of the investee, the length of time and the extent to which the fair value has been less than Ciena's cost basis, and its intent and ability to hold the investment until maturity or for a period of time sufficient to allow for any anticipated recovery in market value. Ciena considers all marketable debt securities that it expects to convert to cash within one year or less to be short-term investments. All others are considered long-term investments.

Ciena had a minority equity investment in a privately held technology company. This investment was carried at cost because Ciena did not have the ability to exercise significant influence over the company. During fiscal 2011, as a result of the sale of this privately held technology company, Ciena recorded a gain of \$7.2 million of which \$1.0 million remained in escrow at October 31, 2011.

Inventories

Inventories are stated at the lower of cost or market, with cost computed using standard cost, which approximates actual cost, on a first-in, first-out basis. Ciena records a provision for excess and obsolete inventory when an impairment has been identified.

Goodwill

Goodwill is the excess of the purchase price over the fair values assigned to the net assets acquired in a business combination. Goodwill is assigned to the reporting units that are expected to benefit from the synergies of the combination. Ciena has determined that its operating segments and reporting units for goodwill assignment are the same. This determination is based on the fact that components below Ciena's operating segment level, such as individual product or service offerings, do not constitute a reporting unit because they do not constitute a business for which discrete financial information is available.

Ciena tests each reporting unit's goodwill for impairment on an annual basis, which Ciena has determined to be the last business day of its fiscal September each year. Testing is required between annual tests if events occur or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value.

Segment Reporting

Ciena's chief operating decision maker, its chief executive officer, evaluates performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories: (i) Packet-Optical Transport; (ii) Packet-Optical Switching; (iii) Carrier-Ethernet Solutions; and (iv) Software and Services. Operating segments are defined as components of an enterprise: that engage in business activities which may earn revenue and incur expense; for which discrete financial information is available; and for which such information is evaluated regularly by the chief operating decision maker for purposes of allocating resources and assessing performance. Ciena considers the four product categories above to be its operating segments for reporting purposes. See Note 19.

Long-lived Assets

Long-lived assets include: equipment, furniture and fixtures; intangible assets; and maintenance spares. Ciena tests long-lived assets for impairment whenever triggering events or changes in circumstances indicate that the assets' carrying amount is not recoverable from its undiscounted cash flows. An impairment loss is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value. Ciena's long-lived assets are assigned to asset groups which represent the lowest level for which cash flows can be identified.

Equipment, Furniture and Fixtures

Equipment, furniture and fixtures are recorded at cost. Depreciation and amortization are computed using the straight-line method over useful lives of two years to five years for equipment, furniture and fixtures and the shorter of useful life or lease term for leasehold improvements.

Qualifying internal use software and website development costs incurred during the application development stage that consist primarily of outside services and purchased software license costs, are capitalized and amortized straight-line over the estimated useful lives of two years to five years.

Intangible Assets

Ciena has recorded finite-lived intangible assets as a result of several acquisitions. Finite-lived intangible assets are carried

at cost less accumulated amortization. Amortization is computed using the straight-line method over the expected economic lives of the respective assets, from nine months to seven years, which approximates the use of intangible assets.

Maintenance Spares

Maintenance spares are recorded at cost. Spares usage cost is expensed ratably over four years.

Concentrations

Substantially all of Ciena's cash and cash equivalents are maintained at a small number of major U.S. financial institutions. The majority of Ciena's cash equivalents consist of money market funds. Deposits held with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and, therefore, management believes that they bear minimal risk.

Historically, a significant percentage of Ciena's revenue has been concentrated among sales to a small number of large communications service providers. Consolidation among Ciena's customers has increased this concentration. Consequently, Ciena's accounts receivable are concentrated among these customers. See Note 19 below.

Additionally, Ciena's access to certain materials or components is dependent upon sole or limited source suppliers. The inability of any of these suppliers to fulfill Ciena's supply requirements, or significant changes in their cost, could affect future results. Ciena relies on a small number of contract manufacturers to perform the majority of the manufacturing for its products. If Ciena cannot effectively manage these manufacturers and forecast future demand, or if they fail to deliver products or components on time, Ciena's business and results of operations may suffer.

Revenue Recognition

Ciena recognizes revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price to the buyer is fixed or determinable; and collectibility is reasonably assured. Customer purchase agreements and customer purchase orders are generally used to determine the existence of an arrangement. Shipping documents and evidence of customer acceptance, when applicable, are used to verify delivery or services rendered. Ciena assesses whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. Ciena assesses collectibility based primarily on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. Revenue for maintenance services is generally deferred and recognized ratably over the period during which the services are to be performed.

Ciena applies the percentage of completion method to long-term arrangements where it is required to undertake significant production, customizations or modification engineering, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, Ciena recognizes revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance.

Software revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. In instances where final acceptance criteria of the software is specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

Ciena limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or refund privileges.

Accounting for multiple element arrangements entered into prior to fiscal 2011

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, Ciena allocates the arrangement fee among separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence ("VSOE") of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services revenue recognized is affected by Ciena's judgment as to whether an arrangement includes multiple elements and, if so, whether VSOE of fair value exists. VSOE is established based on Ciena's standard pricing and discounting practices for the

specific product or service when sold separately. In determining VSOE, Ciena requires that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Changes to the elements in an arrangement and Ciena's ability to establish VSOE for those elements could affect the timing of revenue recognition. For all other multiple element arrangements, Ciena separates the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially in Ciena's control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

Accounting for multiple element arrangements entered into or materially modified in fiscal 2011

In October 2009, the Financial Accounting Standards Board ("FASB") amended the accounting standard for revenue recognition with multiple deliverables which provided guidance on how the arrangement fee should be allocated and allows the use of management's best estimate of selling price ("BESP") for individual elements of an arrangement when VSOE or third-party evidence ("TPE") is unavailable. Additionally, it eliminates the residual method of revenue recognition in accounting for multiple deliverable arrangements. The FASB also amended the accounting guidance for revenue arrangements with software elements to exclude from the scope of the software revenue recognition guidance, tangible products that contain both software and non-software components that function together to deliver the product's essential functionality.

Ciena adopted the new accounting guidance on a prospective basis for arrangements entered into or materially modified on or after November 1, 2010. Under the new guidance, Ciena separates elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, and delivery of the undelivered element(s) is probable and substantially in Ciena's control. Therefore, the new guidance allows for deliverables, for which revenue was previously deferred due to an absence of fair value, to be separated and recognized as revenue as delivered. Also, because the residual method has been eliminated, discounts offered by Ciena are allocated to all deliverables, rather than to the delivered element(s). Ciena's adoption of the new guidance for revenue arrangements changed the accounting for certain Ciena products that consist of hardware and software components, in which these components together provided the product's essential functionality. For arrangements involving these products entered into prior to fiscal 2011, Ciena recognized revenue based on software revenue recognition guidance.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each delivered element, with revenue recognized when the revenue recognition criteria are met for each delivered element. Ciena determines the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, Ciena uses VSOE of selling price, if it exists, or TPE of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, Ciena uses its BESP for that deliverable.

VSOE is established based on Ciena's standard pricing and discounting practices for the specific product or service when sold separately. In determining VSOE, which exists across certain of Ciena's service offerings, Ciena requires that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Ciena has been unable to establish TPE of selling price because its go-to-market strategy differs from that of others in its markets, and the extent of customization and differentiated features and functions varies among comparable products or services from its peers. Ciena determines BESP based upon management-approved pricing guidelines, which consider multiple factors including the type of product or service, gross margin objectives, competitive and market conditions, and the go-to-market strategy; all of which can affect pricing practices.

Historically, for arrangements with multiple elements, Ciena was typically able to establish fair value for undelivered elements and so Ciena applied the residual method. As a result, assuming the adoption of the accounting guidance above on a prospective basis for arrangements entered into or materially modified on or after November 1, 2009, the effect on revenue recognized for fiscal 2010 would have been an increase of approximately \$33.0 million.

Warranty Accruals

Ciena provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. Estimated warranty costs include estimates for material costs, technical support labor costs and associated overhead. The warranty liability is included in cost of goods sold and determined based upon actual warranty cost experience, estimates of component failure rates and management's industry experience. Ciena's sales contracts do not permit the right of return of product by the customer after the product has been accepted.

Accounts Receivable, Net

Ciena's allowance for doubtful accounts is based on its assessment, on a specific identification basis, of the collectibility of customer accounts. Ciena performs ongoing credit evaluations of its customers and generally has not required collateral or other forms of security from its customers. In determining the appropriate balance for Ciena's allowance for doubtful accounts, management considers each individual customer account receivable in order to determine collectibility. In doing so, management considers creditworthiness, payment history, account activity and communication with such customer. If a customer's financial condition changes, Ciena may be required to record an allowance for doubtful accounts, which would negatively affect its results of operations.

Research and Development

Ciena charges all research and development costs to expense as incurred. Types of expense incurred in research and development include employee compensation, prototype, consulting, depreciation, facility costs and information technologies.

Government Grants

Ciena accounts for proceeds from government grants as a reduction of expense when there is reasonable assurance that Ciena has complied with the conditions attached to the grant and that the grant proceeds will be received. Grant benefits are recorded to the line item in the Consolidated Statement of Operations to which the grant activity relates. See Note 21 below.

Advertising Costs

Ciena expenses all advertising costs as incurred.

Legal Costs

Ciena expenses legal costs associated with litigation defense as incurred.

Share-Based Compensation Expense

Ciena measures and recognizes compensation expense for share-based awards based on estimated fair values on the date of grant. Ciena estimates the fair value of each option-based award on the date of grant using the Black-Scholes option-pricing model. This model is affected by Ciena's stock price as well as estimates regarding a number of variables including expected stock price volatility over the expected term of the award and projected employee stock option exercise behaviors. Ciena estimates the fair value of each share-based award based on the fair value of the underlying common stock on the date of grant. In each case, Ciena only recognizes expense to its consolidated statement of operations for those options or shares that are expected ultimately to vest. Ciena uses two attribution methods to record expense, the straight-line method for grants with only service-based vesting and the graded-vesting method, which considers each performance period or tranche separately, for all other awards. See Note 18 below.

Income Taxes

Ciena accounts for income taxes using an asset and liability approach that recognizes deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases, and for operating loss and tax credit carryforwards. In estimating future tax consequences, Ciena considers all expected future events other than the enactment of changes in tax laws or rates. Valuation allowances are provided, if, based upon the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

In the ordinary course of business, transactions occur for which the ultimate outcome may be uncertain. In addition, tax authorities periodically audit Ciena's income tax returns. These audits examine significant tax filing positions, including the timing and amounts of deductions and the allocation of income tax expenses among tax jurisdictions. Ciena is currently under audit in India for 2007 and 2008, Mexico for 2007 and the United Kingdom for 2009. Management does not expect the outcome of these audits to have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows. Ciena's major tax jurisdictions and the earliest open tax years are as follows: United States (2008), United Kingdom (2005), Canada (2005) and India (2007). However, limited adjustments can be made to Federal tax returns in earlier years in order to reduce net operating loss carryforwards. Ciena classifies interest and penalties related to uncertain tax positions as a component of income tax expense. All of the uncertain tax positions, if recognized, would decrease the effective income tax rate.

Ciena has not provided for U.S. deferred income taxes on the cumulative unremitted earnings of its non-U.S. affiliates as it plans to permanently reinvest cumulative unremitted foreign earnings outside the U.S. and it is not practicable to determine the

unrecognized deferred income taxes. These cumulative unremitted foreign earnings relate to ongoing operations in foreign jurisdictions and are required to fund foreign operations, capital expenditures and any expansion requirements.

Ciena recognizes windfall tax benefits associated with the exercise of stock options or release of restricted stock units directly to stockholders' equity only when realized. A windfall tax benefit occurs when the actual tax benefit realized by Ciena upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that Ciena had recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, Ciena follows the tax law "with-and-without" method. Under the with-and-without method, the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after considering all other tax benefits including Ciena's net operating losses. The with-and-without method results in the windfall from share-based compensation awards always being effectively the last tax benefit to be considered. Consequently, the windfall attributable to share-based compensation will not be considered realized in instances where Ciena's net operating loss carryover (that is unrelated to windfalls) is sufficient to offset the current year's taxable income before considering the effects of current-year windfalls.

Loss Contingencies

Ciena is subject to the possibility of various losses arising in the ordinary course of business. These may relate to disputes, litigation and other legal actions. Ciena considers the likelihood of loss or the incurrence of a liability, as well as Ciena's ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Ciena regularly evaluates current information available to it in order to determine whether any accruals should be adjusted and whether new accruals are required.

Fair Value of Financial Instruments

The carrying value of Ciena's cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities, approximates fair market value due to the relatively short period of time to maturity. For information related to the fair value of Ciena's convertible notes, see Note 14 below.

Fair value for the measurement of financial assets and liabilities is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Ciena utilizes a valuation hierarchy for disclosure of the inputs for fair value measurement. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs are quoted prices for identical or similar assets or liabilities in less active markets or model-derived valuations in which significant inputs are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument;
- Level 3 inputs are unobservable inputs based on Ciena's assumptions used to measure assets and liabilities at fair value.

By distinguishing between inputs that are observable in the marketplace, and therefore more objective, and those that are unobservable and therefore more subjective, the hierarchy is designed to indicate the relative reliability of the fair value measurements. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Restructuring

From time to time, Ciena takes actions to better align its workforce, facilities and operating costs with perceived market opportunities, business strategies and changes in market and business conditions. Ciena implements these restructuring plans and incurs the associated liability concurrently. Generally accepted accounting principles require that a liability for the cost associated with an exit or disposal activity be recognized in the period in which the liability is incurred, except for one-time employee termination benefits related to a service period of more than 60 days, which are accrued over the service period. See Note 3 below.

Foreign Currency

Some of Ciena's foreign branch offices and subsidiaries use the U.S. dollar as their functional currency because Ciena, as the U.S. parent entity, exclusively funds the operations of these branch offices and subsidiaries. For those subsidiaries using the local currency as their functional currency, assets and liabilities are translated at exchange rates in effect at the balance sheet date, and the statement of operations is translated at a monthly average rate. Resulting translation adjustments are recorded directly to a separate component of stockholders' equity. Where the monetary assets and liabilities are transacted in a currency other than the entity's functional currency, re-measurement adjustments are recorded in other income. The net gain (loss) on foreign currency re-measurement and exchange rate changes is immaterial for separate financial statement presentation.

Derivatives

Ciena's 4.0% convertible senior notes include a redemption feature that is accounted for as a separate embedded derivative. The embedded redemption feature is recorded at fair value on a recurring basis and these changes are included in interest and other income, net on the Consolidated Statement of Operations.

From time to time, Ciena uses foreign currency forward contracts to reduce variability in certain forecasted non U.S.-dollar denominated cash flows. Generally, these derivatives have maturities of twelve months or less and are designated as cash flow hedges. At the inception of the cash flow hedge, and on an ongoing basis, Ciena assesses whether the forward contract has been effective in offsetting changes in cash flows attributable to the hedged risk during the hedging period. The effective portion of the derivative's net gain or loss is initially reported as a component of accumulated other comprehensive income (loss), and, upon the occurrence of the forecasted transaction, is subsequently reclassified to the line item in the Consolidated Statement of Operations to which the hedged transaction relates. Any net gain or loss associated with the ineffectiveness of the hedging instrument is reported in interest and other income, net. See Note 13 below.

Computation of Net Income (Loss) per Share

Ciena calculates basic earnings per share (EPS) by dividing earnings attributable to common stock by the weighted-average number of common shares outstanding for the period. Diluted EPS includes other potential dilutive shares that would be outstanding if securities or other contracts to issue common stock were exercised or converted into common stock. Ciena uses a dual presentation of basic and diluted EPS on the face of its income statement. A reconciliation of the numerator and denominator used for the basic and diluted EPS computations is set forth in Note 15.

Software Development Costs

Ciena develops software for sale to its customers. Generally accepted accounting principles require the capitalization of certain software development costs that are incurred subsequent to the date technological feasibility is established and prior to the date the product is generally available for sale. The capitalized cost is then amortized straight-line over the estimated life of the product. Ciena defines technological feasibility as being attained at the time a working model is completed. To date, the period between Ciena achieving technological feasibility and the general availability of such software has been short, and software development costs qualifying for capitalization have been insignificant. Accordingly, Ciena has not capitalized any software development costs.

Newly Issued Accounting Standards

In June 2011, the FASB issued an accounting standards update that requires an entity to present total comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements and eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. This guidance is effective for fiscal years and interim periods beginning after December 15, 2011. Early adoption is permitted. Ciena does not expect this new guidance to have any impact on its financial condition, results of operations and cash flows.

In May 2011, the FASB issued an accounting standards update that amends current fair value measurement and disclosure guidance to converge with International Financial Reporting Standards (IFRS). This update provides improved comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. GAAP and IFRS. This guidance is effective for fiscal years and interim periods, beginning after December 15, 2011. Early application by public companies is not permitted. Ciena does not expect this new guidance to have any impact on its financial condition, results of operations and cash flows.

(2) BUSINESS COMBINATIONS

Acquisition of MEN Business

On March 19, 2010, Ciena completed its acquisition of the MEN Business. Ciena acquired the MEN Business in an effort to strengthen its technology leadership position in next-generation, converged optical Ethernet networking, accelerate the execution of its corporate and research and development strategies and enable Ciena to better compete with larger equipment vendors. The acquisition expanded Ciena's geographic reach, customer relationships, and portfolio of network solutions.

In accordance with the agreements for the acquisition, the \$773.8 million aggregate purchase price was subsequently adjusted downward by \$80.6 million based upon the amount of net working capital transferred to Ciena at closing. As a result, Ciena paid \$693.2 million in cash for the purchase of the MEN Business.

In connection with the acquisition, Ciena entered into an agreement with Nortel to lease the "Lab 10" building on Nortel's Carling Campus in Ottawa, Canada (the "Carling lease") for a term of ten years. The lease agreement contained a provision that allowed Nortel to reduce the term of the lease, and in exchange, Ciena could receive a payment of up to \$33.5 million. This amount was placed into escrow by Nortel in accordance with the acquisition agreements. The \$16.4 million fair value of this contingent refund right was recorded as a reduction to the consideration paid, resulting in a purchase price of \$676.8 million.

On October 19, 2010, Nortel issued a public announcement that it had entered into a sale agreement of its Carling campus with Publics Works and Government Services Canada (PWGSC) and had been directed to exercise its early termination rights under the Carling lease, shortening the lease term from ten years to five years. As a result, and based on this change in circumstances and expected outcome probability, during the fourth quarter of fiscal 2010 Ciena recorded an unrealized gain of \$13.8 million resulting in a fair value of \$30.2 million for the contingent consideration right. During the first quarter of fiscal 2011, Ciena received notice of early termination from Nortel and the corresponding \$33.5 million payment described above, resulting in a gain of \$3.3 million.

During fiscal 2010, Ciena incurred \$101.4 million in transaction, consulting and third party service fees, \$8.5 million in restructuring expense, and an additional \$12.4 million in costs primarily related to purchases of capitalized information technology equipment. During fiscal 2011, Ciena incurred \$42.1 million in transaction, consulting and third party service fees, \$6.6 million in restructuring expense, and an additional \$10.9 million in costs primarily related to purchases of capitalized information technology equipment.

The following table summarizes the final purchase price allocation related to the MEN Business, based on the estimated fair value of the acquired assets and assumed liabilities (in thousands):

	Final Allocation
Unbilled receivables	\$ 7,136
Inventories	146,272
Prepaid expenses and other	32,517
Other long-term assets	21,924
Equipment, furniture and fixtures	41,213
Developed technology	218,774
In-process research and development	11,000
Customer relationships, outstanding purchase orders and contracts	260,592
Trade name	2,000
Deferred revenue	(28,086)
Accrued liabilities	(33,845)
Other long-term obligations	(2,644)
Total purchase price allocation	<u>\$ 676,853</u>

Unbilled receivables represent unbilled claims for which Ciena will invoice customers upon its completion of the acquired projects.

Under the acquisition method of accounting, Ciena recorded the acquired finished goods inventory at fair value, which was determined to be most appropriately recognized as the estimated selling price less the sum of (a) costs of disposal, and (b) a reasonable profit allowance for Ciena's selling effort.

Prepaid expenses and other include product demonstration units used to support research and development projects and indemnification assets related to uncertain tax contingencies acquired and recorded as part of other long-term obligations. Other long-term assets represent spares used to support customer maintenance commitments.

Developed technology represents purchased technology that had reached technological feasibility and for which development had been completed as of the date of the acquisition. Developed technology will be amortized on a straight line basis over its estimated useful lives of two to seven years.

In-process research and development represents development projects that had not reached technological feasibility at the time of the acquisition. This in-process research and development was completed during the fourth quarter of fiscal 2010 and is being amortized over a period of seven years. Expenditures to complete the in-process research and development were expensed as incurred.

Customer relationships, outstanding purchase orders and contracts represent agreements with existing customers of the MEN Business. These intangible assets are expected to have estimated useful lives of nine months to seven years, with the exception of \$14.6 million related to a contract asset for acquired in-process projects, to be billed by Ciena and recognized as a reduction in revenue. As of October 31, 2011, Ciena has billed \$13.8 million of these contract assets. The remaining \$0.8 million will be billed during the first half of fiscal 2012. Trade name represents acquired product trade names that are expected to have a useful life of nine months.

Deferred revenue represents obligations assumed by Ciena to provide maintenance support services for which payment for such services was already made to Nortel.

Accrued liabilities represent assumed warranty obligations, other customer contract obligations, and certain employee benefit plans. Other long-term obligations represent uncertain tax contingencies.

The following unaudited pro forma financial information summarizes the results of operations for the period indicated as if Ciena's acquisition of the MEN Business had been completed as of the beginning of the period presented. These pro forma amounts (in thousands) do not purport to be indicative of the results that would have actually been obtained if the acquisition occurred as of the beginning of the periods presented or that may be obtained in the future.

	Fiscal Year	
	2009	2010
Pro forma revenue	\$ 1,704,037	\$ 1,592,911
Pro forma net loss	<u>\$ (1,008,894)</u>	<u>\$ (536,253)</u>

(3) RESTRUCTURING COSTS

Since the acquisition of the MEN Business, Ciena has undertaken a number of restructuring activities intended to reduce operating expense and better align its workforce and operating costs with market opportunities, product development and business strategies for the combined operations.

The following table displays the activity and balances of the historical restructuring liability accounts for the fiscal years indicated (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2008	\$ 982	\$ 3,243	\$ 4,225
Additional liability recorded	4,117 (a)	3,419 (a)	7,536
Adjustment to previous estimates	—	3,670 (a)	3,670
Cash payments	(4,929)	(897)	(5,826)
Balance at October 31, 2009	170	9,435	9,605
Additional liability recorded	9,256 (b)	—	9,256
Adjustment to previous estimates	—	(742) (b)	(742)
Cash payments	(7,850)	(2,301)	(10,151)
Balance at October 31, 2010	1,576	6,392	7,968
Additional liability recorded	6,627 (c)	—	6,627
Adjustment to previous estimates	—	(846) (c)	(846)
Cash payments	(8,043)	(2,253)	(10,296)
Balance at October 31, 2011	\$ 160	\$ 3,293	\$ 3,453
Current restructuring liabilities	\$ 160	\$ 504	\$ 664
Non-current restructuring liabilities	\$ —	\$ 2,789	\$ 2,789

- (a) During fiscal 2009, Ciena recorded a charge of \$4.1 million of severance and other employee-related costs associated with a workforce reduction of 200 employees, \$3.4 million related to the Acton, MA facility closure and \$3.7 million related to previously restructured facilities.
- (b) During fiscal 2010, Ciena recorded a charge of \$2.1 million related to a workforce reduction of approximately 70 employees, principally affecting Ciena's global product group and global field organization outside of the EMEA region and \$7.1 million related to a workforce reduction of 82 employees associated with the restructuring activities in the EMEA region described above and an adjustment of \$0.7 million associated with previously restructured facilities.
- (c) During fiscal 2011, Ciena recorded a charge of \$6.6 million of severance and other employee-related costs associated with a workforce reduction of approximately 150 employees related to a number of restructuring activities intended to reduce operating expense and better align its workforce with market opportunities. Ciena also recorded an adjustment of \$0.8 million related to its previously restructured Acton, MA facility.

(4) GOODWILL AND LONG-LIVED ASSET IMPAIRMENTS

Goodwill

As of October 31, 2010 and 2011, Ciena did not have any goodwill on its Consolidated Balance Sheets.

Prior to the acquisition of the MEN Business, Ciena assessed its goodwill based upon a single reporting unit and tested its single reporting unit's goodwill for impairment annually on the last business day of fiscal September each year. Testing is required between annual tests if events occur or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value. Based on a combination of factors, including macroeconomic conditions and a sustained decline in Ciena's common stock price and market capitalization below net book value, Ciena conducted an interim impairment assessment of goodwill during the second quarter of fiscal 2009. Ciena performed the step one fair value comparison, and its market capitalization was \$721.8 million and its carrying value, including goodwill, was \$949.0 million. Ciena applied a 25% control premium to its market capitalization to determine a fair value of \$902.2 million. Because step one indicated that Ciena's fair value was less than its carrying value, Ciena performed the step two analysis. Under the step two analysis, the implied fair value of goodwill requires valuation of a reporting unit's tangible and intangible assets and liabilities in a manner similar to the allocation of purchase price in a business combination. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, goodwill is deemed impaired and is written down to the extent of the difference. The implied fair value of the reporting unit's goodwill was determined to be \$0, and, as a result, Ciena recorded a goodwill impairment of \$455.7 million, representing the full carrying value of the goodwill.

Long-Lived Assets

Due to effects of difficult macroeconomic conditions on Ciena's business, including lengthening sales cycles and slowing deployments resulting in lower demand, Ciena performed an impairment analysis of its long-lived assets during the second quarter of fiscal 2009. Based on Ciena's estimate of future undiscounted cash flows by asset group, as of April 30, 2009, no impairment was required.

Due to the reorganization as a result of the MEN Acquisition, Ciena performed an impairment analysis of its long-lived assets during the second quarter of fiscal 2010. Based on Ciena's estimate of future undiscounted cash flows by asset group, no impairment was required. Due to the lack of a triggering event, no impairment analysis was performed in fiscal 2011.

(5) MARKETABLE DEBT SECURITIES

As of October 31, 2010, Ciena had no investments in marketable debt securities. As of October 31, 2011, long-term investments in marketable debt securities are comprised of the following (in thousands):

	October 31, 2011			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
US government obligations	\$ 49,933	\$ 331	\$ —	\$ 50,264
	<u>\$ 49,933</u>	<u>\$ 331</u>	<u>\$ —</u>	<u>\$ 50,264</u>

Gross unrealized losses related to marketable debt investments, included in short-term investments at October 31, 2009, were immaterial.

The following table summarizes final legal maturities of debt investments at October 31, 2011 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	\$ —	\$ —
Due in 1-2 years	49,933	50,264
	<u>\$ 49,933</u>	<u>\$ 50,264</u>

(6) FAIR VALUE MEASUREMENTS

As of the date indicated, the following table summarizes the fair value of assets that are recorded at fair value on a recurring basis (in thousands):

	October 31, 2010			
	Level 1	Level 2	Level 3	Total
Assets:				
Embedded redemption feature	\$ —	\$ —	\$ 4,220	\$ 4,220
Contingent consideration	—	—	30,195	30,195
Total assets measured at fair value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 34,415</u>	<u>\$ 34,415</u>

	October 31, 2011			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S. government obligations	\$ 50,264	\$ —	\$ —	\$ 50,264
Embedded redemption feature	—	—	7,020	7,020
Total assets measured at fair value	<u>\$ 50,264</u>	<u>\$ —</u>	<u>\$ 7,020</u>	<u>\$ 57,284</u>

As of the dates indicated, the assets above were presented on Ciena's Consolidated Balance Sheet as follows (in thousands):

	October 31, 2010			
	Level 1	Level 2	Level 3	Total
Assets:				
Prepaid expenses and other	\$ —	\$ —	\$ 30,195	\$ 30,195
Other long-term assets	—	—	4,220	4,220
Total assets measured at fair value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 34,415</u>	<u>\$ 34,415</u>

	October 31, 2011			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-term investments	\$ 50,264	\$ —	\$ —	\$ 50,264
Other long-term assets	—	—	7,020	7,020
Total assets measured at fair value	<u>\$ 50,264</u>	<u>\$ —</u>	<u>\$ 7,020</u>	<u>\$ 57,284</u>

Ciena's Level 3 assets included in prepaid expenses and other at October 31, 2010 reflect its contingent right to receive a refund of up to \$33.5 million in aggregate purchase price paid in the MEN Acquisition. The fair value was based on the weighted average probabilities of expected cash flows discounted to its present value. Ciena's Level 3 assets included in other long-term assets reflect an embedded redemption feature contained within Ciena's 4.0% convertible senior notes. See Note 14 below. The embedded redemption feature is bifurcated from Ciena's 4.0% convertible senior notes using the "with-and-without" approach. As such, the total value of the embedded redemption feature is calculated as the difference between the value of the 4.0% convertible senior notes (the "Hybrid Instrument") and the value of an identical instrument without the embedded redemption feature (the "Host Instrument"). Both the Host Instrument and the Hybrid Instrument are valued using a modified binomial model. The modified binomial model utilizes a risk free interest rate, an implied volatility of Ciena's stock, the recovery rates of bonds and the implied default intensity of the 4.0% convertible senior notes.

As of the dates indicated, the following table sets forth, in thousands, the reconciliation of changes in Level 3 assets recorded at fair value:

	Level 3
Balance at October 31, 2010	\$ 34,415
Issuances	—
Settlements	(30,195)
Changes in unrealized gain	2,800
Transfers into Level 3	—
Transfers out of Level 3	—
Balance at October 31, 2011	<u>\$ 7,020</u>

During fiscal 2009, a private technology company in which Ciena held a minority equity investment completed a round of equity financing and merged with another private technology company. These events required Ciena to perform an impairment analysis and measure the investment at fair value. In determining fair value, Ciena utilized Level 3 inputs including the recapitalization resulting from both the completion of the merger and the equity financing. Also, during fiscal 2009, a separate

private technology company in which Ciena held a minority equity investment was acquired by a publicly-traded company. This event required Ciena to perform an impairment analysis and measure the investment at fair value. In determining fair value, Ciena utilized Level 2 inputs including the relevant exchange ratio for the acquisition transaction and the market price of the acquirer's common stock. Based on Ciena's ownership interest and the value of its investment following these events, Ciena recorded a non-cash loss on cost method investments of \$5.3 million.

(7) ACCOUNTS RECEIVABLE

Ciena has not historically experienced a significant amount of bad debt expense. The following table summarizes the activity in Ciena's allowance for doubtful accounts for the fiscal years indicated (in thousands):

Year ended October 31,	Balance at beginning of period	Provisions	Net Deductions	Balance at end of period
2009	\$ 124	\$ 93	\$ 101	\$ 116
2010	\$ 116	\$ 1	\$ —	\$ 117
2011	\$ 117	\$ 1,696	\$ 1,112	\$ 701

(8) INVENTORIES

As of the dates indicated, inventories are comprised of the following (in thousands):

	October 31,	
	2010	2011
Raw materials	\$ 30,569	\$ 45,333
Work-in-process	6,993	13,851
Finished goods	177,994	134,998
Deferred cost of goods sold	76,830	67,665
	292,386	261,847
Provision for excess and obsolescence	(30,767)	(31,771)
	<u>\$ 261,619</u>	<u>\$ 230,076</u>

Ciena writes down its inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. During fiscal 2009, fiscal 2010 and fiscal 2011, recorded provisions for inventory reserves were primarily related to changes in forecasted sales for certain products. Deductions from the reserve for excess and obsolete inventory relate to disposal activities.

The following table summarizes the activity in Ciena's reserve for excess and obsolete inventory for the fiscal years indicated (in thousands):

Year ended October 31,	Balance at beginning of period	Provisions	Disposals	Balance at end of period
2009	\$ 23,257	\$ 15,719	\$ 14,974	\$ 24,002
2010	\$ 24,002	\$ 13,696	\$ 6,931	\$ 30,767
2011	\$ 30,767	\$ 17,334	\$ 16,330	\$ 31,771

(9) PREPAID EXPENSES AND OTHER

As of the dates indicated, prepaid expenses and other are comprised of the following (in thousands):

	October 31,	
	2010	2011
Prepaid VAT and other taxes	\$ 46,352	\$ 44,969
Deferred deployment expense	6,918	17,839
Product demonstration equipment, net	29,449	46,996
Prepaid expenses	15,087	14,769
Restricted cash	12,994	12,533
Contingent consideration	30,195	—
Other non-trade receivables	6,685	6,251
	<u>\$ 147,680</u>	<u>\$ 143,357</u>

Depreciation of product demonstration equipment was \$4.2 million and \$9.7 million for fiscal 2010 and 2011, respectively.

(10) EQUIPMENT, FURNITURE AND FIXTURES

As of the dates indicated, equipment, furniture and fixtures are comprised of the following (in thousands):

	October 31,	
	2010	2011
Equipment, furniture and fixtures	\$ 360,908	\$ 396,310
Leasehold improvements	49,595	50,380
	<u>410,503</u>	<u>446,690</u>
Accumulated depreciation and amortization	(290,209)	(324,132)
	<u>\$ 120,294</u>	<u>\$ 122,558</u>

During fiscal 2009, fiscal 2010 and fiscal 2011, Ciena recorded depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements of \$21.9 million, \$38.5 million and \$50.5 million, respectively.

(11) INTANGIBLE ASSETS

As of the dates indicated, intangible assets are comprised of the following (in thousands):

	October 31,					
	2010			2011		
	Gross Intangible	Accumulated Amortization	Net Intangible	Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	\$ 417,833	\$ (186,129)	\$ 231,704	\$ 417,833	\$ (234,393)	\$ 183,440
Patents and licenses	45,388	(45,167)	221	46,538	(45,320)	1,218
Customer relationships, covenants not to compete, outstanding purchase orders and contracts	323,573	(129,086)	194,487	323,573	(176,596)	146,977
Total intangible assets	<u>\$ 786,794</u>	<u>\$ (360,382)</u>	<u>\$ 426,412</u>	<u>\$ 787,944</u>	<u>\$ (456,309)</u>	<u>\$ 331,635</u>

The aggregate amortization expense of intangible assets was \$31.4 million, \$127.0 million and \$95.9 million for fiscal 2009, fiscal 2010 and fiscal 2011, respectively. Expected future amortization of intangible assets for the fiscal years indicated is as follows (in thousands):

Year Ended October 31,

2012	\$ 74,497
2013	71,309
2014	57,151
2015	52,879
2016	52,879
Thereafter	22,920
	<u>\$ 331,635</u>

(12) OTHER BALANCE SHEET DETAILS

As of the dates indicated, other long-term assets are comprised of the following (in thousands):

	October 31,	
	2010	2011
Maintenance spares inventory, net	\$ 53,654	\$ 50,442
Deferred debt issuance costs, net	28,853	23,481
Embedded redemption feature	4,220	7,020
Restricted cash	37,796	27,507
Other	5,296	5,673
	<u>\$ 129,819</u>	<u>\$ 114,123</u>

Deferred debt issuance costs are amortized using the straight line method which approximates the effect of the effective interest rate method through the maturity of the related debt. Amortization of debt issuance costs, which is included in interest expense, was \$2.3 million, \$3.8 million and \$5.3 million for fiscal 2009, fiscal 2010 and fiscal 2011, respectively.

As of the dates indicated, accrued liabilities are comprised of the following (in thousands):

	October 31,	
	2010	2011
Warranty	\$ 54,372	\$ 47,282
Compensation, payroll related tax and benefits	39,391	51,808
Vacation	20,412	27,808
Current restructuring liabilities	2,784	664
Interest payable	4,345	4,248
Other	72,690	65,194
	<u>\$ 193,994</u>	<u>\$ 197,004</u>

The following table summarizes the activity in Ciena's accrued warranty for the fiscal years indicated (in thousands):

Year ended October 31,	Beginning Balance	Acquired	Provisions	Settlements	Balance at end of period
2009	\$ 37,258	\$ —	\$ 19,286	\$ 16,348	\$ 40,196
2010	\$ 40,196	\$ 24,041	\$ 15,353	\$ 25,218	\$ 54,372
2011	\$ 54,372	\$ —	\$ 18,451	\$ 25,541	\$ 47,282

As a result of the substantial completion of integration activities related to the MEN Business, Ciena consolidated certain support operations and processes during fiscal 2011, resulting in a reduction in costs to service future warranty obligations. As a result of the lower expected costs, Ciena reduced its warranty liability by \$6.9 million, which had the effect of reducing the

provisions in the table above.

As of the dates indicated, deferred revenue is comprised of the following (in thousands):

	October 31,	
	2010	2011
Products	\$ 31,187	\$ 42,915
Services	73,862	80,883
	105,049	123,798
Less current portion	(75,334)	(99,373)
Long-term deferred revenue	\$ 29,715	\$ 24,425

(13) FOREIGN CURRENCY FORWARD CONTRACTS

From time to time, Ciena uses foreign currency forward contracts to reduce variability in certain forecasted non-U.S. dollar denominated cash flows. Generally, these derivatives have maturities of 12 months or less and are designated as cash flow hedges. Ciena considers several factors when evaluating hedges of its forecasted foreign currency exposures, such as significance of the exposure, offsetting economic exposures, potential costs of hedging and the potential for hedge ineffectiveness. During fiscal 2011, Ciena entered into foreign currency forward contracts to hedge certain forecasted CAD and INR denominated cash flows which were designated as cash flow hedges. No portion of the hedging instruments was considered ineffective. Gains and losses from these forward contracts were immaterial during fiscal 2011. Ciena does not enter into derivative transactions for purposes other than hedging economic exposures. As of October 31, 2010 and 2011, there were no foreign currency forward contracts outstanding.

(14) CONVERTIBLE NOTES PAYABLE

Outstanding Convertible Notes Payable

Ciena has four issuances of convertible notes payable outstanding. The notes are senior unsecured obligations of Ciena and rank equally with all of Ciena's other existing and future senior unsecured debt. The indentures governing Ciena's notes provide for customary events of default which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the indenture; defaults in or failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. Generally, if an event of default occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the notes may declare the principal of, accrued interest on, and premium, if any, on all the notes immediately due and payable. Under the indentures, if Ciena undergoes a "fundamental change" (as that term is defined in the indenture governing the notes to include certain change in control transactions), holders of notes will have the right, subject to certain exemptions, to require Ciena to purchase for cash any or all of their notes at a price equal to the principal amount, plus accrued and unpaid interest. If the holder elects to convert his or her notes in connection with a specified fundamental change, in certain circumstances, Ciena will be required to increase the applicable conversion rate, depending on the price paid per share for Ciena common stock and the effective date of the fundamental change transaction.

0.25% Convertible Senior Notes due May 1, 2013

On April 10, 2006, Ciena completed a public offering of 0.25% convertible senior notes due May 1, 2013, in aggregate principal amount of \$300.0 million. Interest is payable on May 1 and November 1 of each year.

During the fourth quarter of fiscal 2010, Ciena repurchased \$81.8 million in aggregate principal amount of its outstanding 0.25% convertible senior notes in privately negotiated transactions, which resulted in a gain of approximately \$4.9 million. As of October 31, 2011, the outstanding principal on these notes was \$216.2 million.

At the election of the holder, notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 25.3001 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of \$39.5255 per share. The notes may be redeemed by Ciena if the closing sale price of Ciena's common stock for at least 20 trading days in any 30 consecutive trading day period ending on the date one day prior to the date of the notice of redemption exceeds 130% of the conversion price. Ciena may redeem the notes in whole or in part, at a redemption price in cash equal to the principal amount to be redeemed, plus accrued and unpaid interest.

Ciena used approximately \$28.5 million of the net proceeds of this offering to purchase a call spread option on its common stock that is intended to limit exposure to potential dilution from the conversion of the notes. See Note 16 below for a

description of this call spread option.

4.0% Convertible Senior Notes, due March 15, 2015

On March 15, 2010, Ciena completed a private placement of 4.0% convertible senior notes due March 15, 2015, in aggregate principal amount of \$375.0 million. Interest is payable on the notes on March 15 and September 15 of each year, beginning on September 15, 2010.

At the election of the holder, the notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 49.0557 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$20.38 per share. The notes may be redeemed by Ciena on or after March 15, 2013 if the closing sale price of Ciena's common stock for at least 20 trading days in any 30 consecutive trading day period ending on the date one day prior to the date of the notice of redemption exceeds 150% of the conversion price. Ciena may redeem the notes in whole or in part, at a redemption price in cash equal to the principal amount to be redeemed, plus accrued and unpaid interest, including any additional interest to, but excluding, the redemption date, plus a make-whole premium payment. The "make whole premium" payment will be made in cash and equal the present value of the remaining interest payments, to maturity, computed using a discount rate equal to 2.75%. The make-whole premium is paid to holders whether or not they convert the notes following Ciena's issuance of a redemption notice. For accounting purposes, this redemption feature is an embedded derivative that is not clearly and closely related to the notes. Consequently, it was initially bifurcated from the indenture and separately recorded at its fair value as an asset with subsequent changes in fair value recorded through earnings. As of October 31, 2011, the fair value of the embedded redemption feature was \$7.0 million and is included in other long-term assets on the Consolidated Balance Sheet. Changes in fair value of the embedded redemption feature in the amount of \$2.8 million are reflected as interest and other income (loss), net in the Consolidated Statement of Operations during fiscal 2011.

The net proceeds from the offering of the notes were \$364.3 million after deducting the placement agents' fees and other fees and expenses. Ciena used \$243.8 million of this amount to fund its payment election to replace its contractual obligation to issue convertible notes to Nortel as part of the aggregate purchase price for the acquisition of the MEN Business. The remaining proceeds were used to reduce the cash on hand required to fund the aggregate purchase price of the MEN Business. See Note 2 above.

0.875% Convertible Senior Notes due June 15, 2017

On June 11, 2007, Ciena completed a public offering of 0.875% convertible senior notes due June 15, 2017, in aggregate principal amount of \$500.0 million. Interest is payable on June 15 and December 15 of each year, beginning on December 15, 2007.

At the election of the holder, notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 26.2154 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$38.15 per share. The notes are not redeemable by Ciena prior to maturity.

Ciena used approximately \$42.5 million of the net proceeds of this offering to purchase a call spread option on its common stock that is intended to limit exposure to potential dilution from conversion of the notes. See Note 16 below for a description of this call spread option.

3.75% Convertible Senior Notes, due October 15, 2018

On October 18, 2010, Ciena completed a private placement of 3.75% convertible senior notes due October 15, 2018, in aggregate principal amount of \$350.0 million. Interest is payable on the notes on April 15 and October 15 of each year, beginning on April 15, 2011.

At the election of the holder, the notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 49.5872 shares per \$1,000 in principal amount, which is equivalent to an initial conversion price of approximately \$20.17 per share.

The net proceeds from the offering were approximately \$340.4 million after deducting the placement agents' fees and other fees and expenses. Ciena used \$76.1 million of the net proceeds to effect the repurchase of its 0.25% convertible senior notes due 2013 described above.

The following table sets forth, in thousands, the carrying value and the estimated current fair value of Ciena's outstanding convertible notes:

Description	October 31, 2011	
	Carrying Value	Fair Value
0.25% Convertible Senior Notes due May 1, 2013	\$ 216,210	\$ 215,399
4.0% Convertible Senior Notes, due March 15, 2015 ⁽¹⁾	376,154	388,125
0.875% Convertible Senior Notes due June 15, 2017	500,000	376,875
3.75% Convertible Senior Notes, due October 15, 2018	350,000	347,375
	<u>\$ 1,442,364</u>	<u>\$ 1,327,774</u>

(1) Includes unamortized bond premium related to embedded redemption feature

The fair value reported above is based on the quoted market price for the notes on the date above.

(15) EARNINGS (LOSS) PER SHARE CALCULATION

The following table (in thousands except per share amounts) is a reconciliation of the numerator and denominator of the basic net income (loss) per common share ("Basic EPS") and the diluted net income (loss) per potential common share ("Diluted EPS"). Basic EPS is computed using the weighted average number of common shares outstanding. Diluted EPS is computed using the weighted average number of (i) common shares outstanding, (ii) shares issuable upon vesting of restricted stock units, (iii) shares issuable under Ciena's employee stock purchase plan and upon exercise of outstanding stock options, using the treasury stock method; and (iv) shares underlying Ciena's outstanding convertible notes.

Numerator

	Year Ended October 31,		
	2009	2010	2011
Net loss	<u>\$ (581,154)</u>	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>

Denominator

	Year Ended October 31,		
	2009	2010	2011
Basic weighted average shares outstanding	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>
Dilutive weighted average shares outstanding	<u>91,167</u>	<u>93,103</u>	<u>95,854</u>

EPS

	Year Ended October 31,		
	2009	2010	2011
Basic EPS	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>
Diluted EPS	<u>\$ (6.37)</u>	<u>\$ (3.58)</u>	<u>\$ (2.04)</u>

The following table summarizes the weighted average shares excluded from the calculation of the denominator for Basic and Diluted EPS due to their anti-dilutive effect for the fiscal years indicated (in thousands):

	Year Ended October 31,		
	2009	2010	2011
Shares underlying stock options, restricted stock units and warrants	8,302	7,397	6,141
0.25% Convertible Senior Notes due May 1, 2013	7,539	7,454	5,470
4.00% Convertible Senior Notes due March 15, 2015	—	11,605	18,395
0.875% Convertible Senior Notes due June 15, 2017	13,108	13,108	13,108
3.75% Convertible Senior Notes due October 15, 2018	—	717	17,356
Total excluded due to anti-dilutive effect	28,949	40,281	60,470

(16) STOCKHOLDERS' EQUITY

Call Spread Options

Ciena holds two call spread options on its common stock relating to the shares issuable upon conversion of two issues of convertible notes. These call spread options are designed to mitigate exposure to potential dilution from the conversion of these notes. Ciena purchased a call spread option relating to the 0.25% convertible senior notes due May 1, 2013 for \$28.5 million during the second quarter of fiscal 2006. Ciena purchased a call spread option relating to the 0.875% convertible senior notes due June 15, 2017 for \$42.5 million during the third quarter of fiscal 2007. In each case, the call spread options were purchased at the time of the notes offering from an affiliate of the underwriter. The cost of each call spread option was recorded as a reduction in paid-in capital.

Each call spread option is exercisable, upon maturity of the relevant issue of convertible notes, for such number of shares of Ciena common stock issuable upon conversion of that series of notes in full. Each call spread option has a “lower strike price” equal to the conversion price for the notes and a “higher strike price” that serves to cap the amount of dilution protection provided. At its election, Ciena can exercise the call spread options on a net cash basis or a net share basis. The value of the consideration of a net share settlement will be equal to the value upon a net cash settlement and can range from \$0, if the market price per share of Ciena common stock upon exercise is equal to or below the lower strike price, to approximately \$45.7 million (in the case of the April 2006 call spread option) or approximately \$76.1 million (in the case of the June 2007 call spread option), if the market price per share of Ciena common stock upon exercise is at or above the higher strike price. If the market price on the date of exercise is between the lower strike price and the higher strike price, in lieu of a net settlement, Ciena may elect to receive the full number of shares underlying the call spread option by paying the aggregate option exercise price, which is equal to the original principal outstanding on that series of notes. Should there be an early unwind of the call spread option, the amount of cash or shares to be received by Ciena will depend upon the existing overall market conditions, and on Ciena’s stock price, the volatility of Ciena’s stock and the remaining term of the call spread option. The number of shares subject to the call spread options, and the lower and higher strike prices, are subject to customary adjustments.

(17) INCOME TAXES

For the periods indicated, the provision (benefit) for income taxes consists of the following (in thousands):

	October 31,		
	2009	2010	2011
Provision (benefit) for income taxes:			
Current:			
Federal	\$ (3,488)	\$ (918)	\$ (194)
State	122	223	(518)
Foreign	2,925	1,936	8,202
Total current	(441)	1,241	7,490
Deferred:			
Federal	(860)	700	160
State	(23)	—	23
Foreign	—	—	—
Total deferred	(883)	700	183
Provision (benefit) for income taxes	\$ (1,324)	\$ 1,941	\$ 7,673

For the periods indicated, income (loss) before provision (benefit) for income taxes consists of the following (in thousands):

	October 31,		
	2009	2010	2011
United States	\$ (591,637)	\$ (317,899)	\$ (240,244)
Foreign	9,159	(13,674)	52,396
Total	<u>\$ (582,478)</u>	<u>\$ (331,573)</u>	<u>\$ (187,848)</u>

For the periods indicated, the tax provision (benefit) reconciles to the amount computed by multiplying income or loss before income taxes by the U.S. federal statutory rate of 35% as follows:

	October 31,		
	2009	2010	2011
Provision at statutory rate	35.00 %	35.00 %	35.00 %
State taxes	(0.02)%	(0.07)%	0.27 %
Foreign taxes	0.05 %	(4.56)%	2.32 %
Research and development credit	0.60 %	2.54 %	11.03 %
Goodwill impairment	(27.38)%	— %	— %
Non-deductible compensation and other	(1.42)%	(1.43)%	(3.96)%
Valuation allowance	(6.60)%	(32.07)%	(48.74)%
Effective income tax rate	<u>0.23 %</u>	<u>(0.59)%</u>	<u>(4.08)%</u>

The significant components of deferred tax assets and liabilities are as follows (in thousands):

	October 31,	
	2010	2011
Deferred tax assets:		
Reserves and accrued liabilities	\$ 30,889	\$ 30,637
Depreciation and amortization	186,716	259,899
NOL and credit carry forward	1,107,059	1,154,571
Other	38,829	22,304
Gross deferred tax assets	1,363,493	1,467,411
Valuation allowance	(1,363,493)	(1,467,411)
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows (in thousands):

Unrecognized tax benefits at October 31, 2008	\$ 4,436
Increase related to positions taken in prior period	106
Increase related to positions taken in current period	1,947
Reductions related to expiration of statute of limitations	(300)
Unrecognized tax benefits at October 31, 2009	6,189
Increase related to positions taken in prior period	26
Increase related to positions taken in current period	3,383
Reductions related to expiration of statute of limitations	(2,156)
Unrecognized tax benefits at October 31, 2010	7,442
Increase related to positions taken in prior period	(450)
Increase related to positions taken in current period	1,847
Reductions related to expiration of statute of limitations	(249)
Unrecognized tax benefits at October 31, 2011	<u>\$ 8,590</u>

As of October 31, 2010 and 2011, Ciena had accrued \$1.4 million and \$1.1 million, respectively, of interest and some minor penalties related to unrecognized tax benefits within other long-term liabilities in the Consolidated Balance Sheets. A charge of \$0.2 million and a benefit of \$0.3 million of interest was recorded to the provision for income taxes during fiscal 2010 and 2011, respectively. If recognized, the entire balance of unrecognized tax benefits would impact the effective tax rate. Over the next 12 months, Ciena does not estimate any material changes in the unrecognized income tax benefits.

During fiscal 2002, Ciena established a valuation allowance against its deferred tax assets. Ciena intends to maintain a valuation allowance until sufficient positive evidence exists to support a reversal. Any future release of valuation allowance may be recorded as a tax benefit increasing net income or as an adjustment to paid-in capital, based on tax ordering requirements. The following table summarizes the activity in Ciena's valuation allowance against its gross deferred tax assets (in thousands):

Year ended October 31,	Balance at beginning of period	Additions	Deductions	Balance at end of period
2009	\$ 1,164,384	\$ 33,683	\$ —	\$ 1,198,067
2010	\$ 1,198,067	\$ 165,426	\$ —	\$ 1,363,493
2011	\$ 1,363,493	\$ 103,918	\$ —	\$ 1,467,411

As of October 31, 2011, Ciena had a \$2.7 billion net operating loss carry forward and a \$0.1 billion income tax credit carry forward which begin to expire in fiscal year 2018 and 2013, respectively. Ciena's ability to use net operating losses and credit carry forwards is subject to limitations pursuant to the ownership change rules of the Internal Revenue Code Section 382.

The income tax provision does not reflect the tax savings resulting from deductions associated with Ciena's equity compensation and the call spread option associated with Ciena's convertible debt. The cumulative tax benefit through October 31, 2011 of approximately \$79.0 million will be credited to additional paid-in capital when realized. For deductions associated with Ciena's equity compensation, credits to paid-in capital will be recorded when those tax benefits are used to reduce taxes payable.

(18) SHARE-BASED COMPENSATION EXPENSE

Ciena grants equity awards under its 2008 Omnibus Incentive Plan and 2003 Employee Stock Purchase Plan ("ESPP"). In connection with its acquisition of the MEN Business, Ciena also adopted the 2010 Inducement Equity Award Plan, pursuant to which it has made awards to eligible persons as described below.

2008 Plan

The 2008 Omnibus Incentive Plan (the "2008 Plan") was approved by Ciena's Board of Directors on December 12, 2007 and became effective upon the approval of Ciena's stockholders on March 26, 2008. The 2008 Plan has a ten year term. The 2008 Plan reserves eight million shares of common stock for issuance, subject to increase from time to time by the number of

shares: (i) subject to outstanding awards granted under Ciena's prior equity compensation plans that terminate without delivery of any stock (to the extent such shares would have been available for issuance under such prior plan), and (ii) subject to awards assumed or substituted in connection with the acquisition of another company.

The 2008 Plan authorizes the issuance of awards including stock options, restricted stock units (RSUs), restricted stock, unrestricted stock, stock appreciation rights (SARs) and other equity and/or cash performance incentive awards to employees, directors, and consultants of Ciena. Subject to certain restrictions, the Compensation Committee of the Board of Directors has broad discretion to establish the terms and conditions for awards under the 2008 Plan, including the number of shares, vesting conditions and the required service or performance criteria. Options and SARs have a maximum term of ten years, and their exercise price may not be less than 100% of fair market value on the date of grant. Repricing of stock options and SARs is prohibited without stockholder approval. Certain change in control transactions may cause awards granted under the 2008 Plan to vest, unless the awards are continued or substituted for in connection with the transaction.

Pursuant to Board and stockholder approval, effective April 14, 2010, Ciena amended its 2008 Plan to (i) increase the number of shares available for issuance by five million shares; and (ii) reduce from 1.6 to 1.31 the fungible share ratio used for counting full value awards, such as restricted stock units, against the shares remaining available under the 2008 Plan. As of October 31, 2011, there were approximately 4.0 million shares authorized and remaining available for issuance under the 2008 Plan.

2010 Inducement Equity Award Plan

On December 8, 2009, the Compensation Committee of the Board of Directors approved the 2010 Inducement Equity Award Plan (the "2010 Plan"). The 2010 Plan is intended to enhance Ciena's ability to attract and retain certain key employees transferred to Ciena in connection with its acquisition of the MEN Business. The 2010 Plan authorizes the issuance of restricted stock or restricted stock units representing up to 2.25 million shares of Ciena common stock. Upon the March 19, 2011 termination of the 2010 Plan, any shares then remaining available ceased to be available for issuance under the 2010 Plan or any other existing Ciena equity incentive plan.

Stock Options

Outstanding stock option awards to employees are generally subject to service-based vesting restrictions and vest incrementally over a four-year period. The following table is a summary of Ciena's stock option activity for the periods indicated (shares in thousands):

	Shares Underlying Options Outstanding	Weighted Average Exercise Price
Balance as of October 31, 2008	6,399	\$ 48.84
Granted	234	8.63
Exercised	(107)	2.33
Canceled	(988)	61.40
Balance as of October 31, 2009	5,538	45.80
Granted	86	12.42
Exercised	(103)	5.21
Canceled	(519)	95.00
Balance as of October 31, 2010	5,002	40.96
Granted	—	—
Exercised	(411)	14.88
Canceled	(901)	97.64
Balance as of October 31, 2011	3,690	\$ 30.01

The total intrinsic value of options exercised during fiscal 2009, fiscal 2010 and fiscal 2011 was \$0.7 million, \$0.9 million and \$3.4 million, respectively. The weighted average fair value of each stock option granted by Ciena during fiscal 2009 and fiscal 2010 was \$4.94 and \$6.94, respectively. There were no stock options granted by Ciena during fiscal 2011.

The following table summarizes information with respect to stock options outstanding at October 31, 2011, based on

Ciena's closing stock price on the last trading day of Ciena's fiscal 2011 (shares and intrinsic value in thousands):

Options Outstanding at October 31, 2011					Vested Options at October 31, 2011				
Range of Exercise Price	Number of Underlying Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number of Underlying Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value	
\$ 0.94 — \$ 16.31	380	6.03	\$ 8.20	\$ 2,161	277	5.43	\$ 7.48	\$ 1,780	
\$ 16.52 — \$ 17.29	404	3.76	16.69	—	393	3.67	16.67	—	
\$ 17.43 — \$ 24.50	555	3.63	20.49	—	545	3.57	20.49	—	
\$ 24.69 — \$ 28.28	422	5.01	26.98	—	414	4.99	26.98	—	
\$ 28.61 — \$ 31.43	284	3.85	29.78	—	276	3.77	29.76	—	
\$ 31.71 — \$ 32.55	524	1.34	31.72	—	521	1.31	31.72	—	
\$ 33.00 — \$ 37.10	350	5.54	35.17	—	337	5.51	35.19	—	
\$ 37.31 — \$ 47.32	511	2.95	44.72	—	508	2.93	44.72	—	
\$ 47.53 — \$ 167.09	257	0.57	66.85	—	257	0.57	66.85	—	
\$ 267.52 — \$ 267.52	3	0.75	267.52	—	3	0.75	267.52	—	
\$ 0.94 — \$ 267.52	<u>3,690</u>	3.61	\$ 30.01	<u>\$ 2,161</u>	<u>3,531</u>	3.45	\$ 30.64	<u>\$ 1,780</u>	

Assumptions for Option-Based Awards

Ciena recognizes the fair value of service-based options as share-based compensation expense on a straight-line basis over the requisite service period. During fiscal 2009 and fiscal 2010, Ciena estimated the fair value of each option award on the date of grant using the Black-Scholes option-pricing model, with the weighted average assumptions in the table below. Ciena did not grant any option-based awards during fiscal 2011.

	Year Ended October 31,	
	2009	2010
Expected volatility	65.0%	61.9%
Risk-free interest rate	1.7%-3.1%	2.0%-3.0%
Expected term (years)	5.2-5.3	5.3-5.5
Expected dividend yield	0.0%	0.0%

Ciena considered the implied volatility and historical volatility of its stock price in determining its expected volatility, and, finding both to be equally reliable, determined that a combination of both would result in the best estimate of expected volatility.

The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of Ciena's employee stock options.

The expected life of employee stock options represents the weighted-average period the stock options are expected to remain outstanding. Ciena uses historical information about specific exercise behavior of its grantees to determine the expected term.

The dividend yield assumption is based on Ciena's history and expectation of dividend payouts.

Because share-based compensation expense is recognized only for those awards that are ultimately expected to vest, the amount of share-based compensation expense recognized reflects a reduction for estimated forfeitures. Ciena estimates forfeitures at the time of grant and revises those estimates in subsequent periods based upon new or changed information. Ciena

relies upon historical experience in establishing forfeiture rates. If actual forfeitures differ from current estimates, total unrecognized share-based compensation expense will be adjusted for future changes in estimated forfeitures.

Restricted Stock Units

A restricted stock unit is a stock award that entitles the holder to receive shares of Ciena common stock as the unit vests. Ciena's outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. Awards subject to service-based conditions typically vest in increments over a three or four-year period. Awards with performance-based vesting conditions require the achievement of certain operational, financial or other performance criteria or targets as a condition of vesting, or the acceleration of vesting, of such awards. Ciena recognizes the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based compensation expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets.

The following table is a summary of Ciena's restricted stock unit activity for the period indicated, with the aggregate fair value of the balance outstanding at the end of each period, based on Ciena's closing stock price on the last trading day of the relevant period (shares and aggregate fair value in thousands):

	Restricted Stock Units Outstanding	Weighted Average Grant Date Fair Value Per Share	Aggregate Fair Value
Balance as of October 31, 2008	1,849	\$ 30.85	\$ 17,773
Granted	3,364		
Vested	(1,358)		
Canceled or forfeited	(139)		
Balance as of October 31, 2009	3,716	14.67	43,591
Granted	3,643		
Vested	(1,846)		
Canceled or forfeited	(322)		
Balance as of October 31, 2010	5,191	13.81	71,681
Granted	2,064		
Vested	(2,466)		
Canceled or forfeited	(491)		
Balance as of October 31, 2011	4,298	\$ 16.28	\$ 59,399

The total fair value of restricted stock units that vested and were converted into common stock during fiscal 2009, fiscal 2010 and fiscal 2011 was \$14.7 million, \$25.7 million and \$45.3 million, respectively. The weighted average fair value of each restricted stock unit granted by Ciena during fiscal 2009, fiscal 2010 and fiscal 2011 was \$7.02, \$13.43 and \$19.73, respectively.

Assumptions for Restricted Stock Unit Awards

The fair value of each restricted stock unit award is based on the closing price on the date of grant. Share-based expense for service-based restricted stock unit awards is recognized, net of estimated forfeitures, ratably over the vesting period on a straight-line basis.

Share-based expense for performance-based restricted stock unit awards, net of estimated forfeitures, is recognized ratably over the performance period based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved involves judgment, and the estimate of expense is revised periodically based on the probability of achieving the performance targets. Revisions are reflected in the period in which the estimate is changed. If any performance goals are not met, no compensation cost is ultimately recognized against that goal and, to the extent previously recognized, compensation cost is reversed.

In March 2003, Ciena stockholders approved the 2003 Employee Stock Purchase Plan (the “ESPP”), which has a ten-year term. Ciena stockholders subsequently approved an amendment increasing the number of shares available to 3.6 million and adopting an “evergreen” provision. On December 31 of each year, the number of shares available under the ESPP will increase by up to 0.6 million shares, provided that the total number of shares available at that time shall not exceed 3.6 million. Pursuant to the evergreen provision, the maximum number of shares that may be added to the ESPP during the remainder of its ten-year term is 2.2 million.

Under the ESPP, eligible employees may enroll in a six-month offer period during certain open enrollment periods. Prior to October 1, 2010, new offer periods began March 16 and September 16 of each year and the purchase price reflected a 5% discount off of the lower of the fair market value of Ciena common stock on the day preceding the offer period or the last day of the offer period. Prior to October 1, 2010, the ESPP was non-compensatory for purposes of share-based compensation expense.

Beginning on October 1, 2010, the six-month offer periods begin on December 21 and June 21 of each year with an initial stub period running from October 1, 2010 through December 20, 2010. The purchase price reflects a 15% discount off of the lower of the fair market value of Ciena common stock on the day preceding the offer period or the last day of the offer period. The current ESPP is considered compensatory for purposes of share-based compensation expense.

During fiscal 2009, fiscal 2010 and fiscal 2011, Ciena issued 0.1 million, 0.1 million and 0.5 million shares under the ESPP, respectively. At October 31, 2009, 2010 and 2011, 3.5 million, 3.5 million and 3.2 million shares remained available for issuance under the ESPP, respectively.

Share-Based Compensation Expense for Periods Reported

The following table summarizes share-based compensation expense for the periods indicated (in thousands):

	Year Ended October 31,		
	2009	2010	2011
Product costs	\$ 2,116	\$ 2,140	\$ 2,269
Service costs	1,599	1,717	1,881
Share-based compensation expense included in cost of goods sold	3,715	3,857	4,150
Research and development	10,006	9,310	10,149
Sales and marketing	10,861	10,950	12,182
General and administrative	10,380	9,959	11,140
Acquisition and integration costs	—	1,342	308
Share-based compensation expense included in operating expense	31,247	31,561	33,779
Share-based compensation expense capitalized in inventory, net	(524)	142	1
Total share-based compensation	\$ 34,438	\$ 35,560	\$ 37,930

As of October 31, 2011, total unrecognized compensation expense was \$59.4 million: (i) \$1.0 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 0.6 year; and (ii) \$58.4 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.6 years.

(19) SEGMENT AND ENTITY WIDE DISCLOSURES

Segment Reporting

Effective upon the March 19, 2010 completion of Ciena’s acquisition of the MEN Business, Ciena reorganized its internal organizational structure and the management of its business. Ciena’s chief operating decision maker, its chief executive officer, evaluates performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories:

- *Packet-Optical Transport* — includes optical transport solutions that increase network capacity and enable more rapid delivery of a broader mix of high-bandwidth services. These products are used by network operators to facilitate the cost effective and efficient transport of voice, video and data traffic in core networks, regional, metro and access networks. Ciena's Packet-Optical Transport products support the efficient delivery of a wide variety of consumer-oriented network services, as well as key managed service and enterprise applications. Ciena's principal products in this segment include the 6500 Packet-Optical Platform, 4200 Advanced Services Platform; Corestream® Agility Optical Transport System, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL), and 6100

Multiservice Optical Platform. This segment also includes sales from legacy SONET/SDH, transport and data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. This segment also includes operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.

- *Packet-Optical Switching* — includes optical switching platforms that enable automated optical infrastructures for the delivery of a wide variety of enterprise and consumer-oriented network services. Ciena's principal products in this segment include its family of CoreDirector® Multiservice Optical Switches, its 5430 Reconfigurable Switching System and its OTN configuration for the 5410 Reconfigurable Switching System. These products include multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both the core and metro segments of communications networks and support key managed service services, Ethernet/TDM Private Line, Triple Play and IP services. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Carrier-Ethernet Solutions* - principally includes Ciena's 3000 family of service delivery switches and service aggregation switches, the 5000 series of service aggregation switches, and its Carrier Ethernet packet configuration for the 5410 Service Aggregation Switch. These products support the access and aggregation tiers of communications networks and have principally been deployed to support wireless backhaul infrastructures and business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration, and maintenance features. This segment also includes legacy broadband products, including the CNX-5 Broadband DSL System (CNX-5), that transitions legacy voice networks to support Internet-based (IP) telephony, video services and DSL. This segment also includes sales of operating system software and enhanced software features embedded in each of these products. Revenue from this segment is included in product revenue on the Consolidated Statement of Operations.
- *Software and Services* - includes the Ciena One software suite, including OneControl, our integrated network and service management software designed to automate and simplify network management, operation and service delivery. These software solutions can track individual services across multiple product suites, facilitating planned network maintenance, outage detection and identification of customers or services affected by network troubles. In addition to Ciena One, this segment includes our ON-Center® Network & Service Management Suite, and the OMEA and Preside platforms from the MEN Business. This segment also includes a broad range of consulting and support services, including installation and deployment, maintenance support, consulting, network design and training activities. Except for revenue from the software portion of this segment, which is included in product revenue, revenue from this segment is included in services revenue on the Consolidated Statement of Operations.

Reportable segment asset information is not disclosed because it is not reviewed by the chief operating decision maker for purposes of evaluating performance and allocating resources.

The table below (in thousands, except percentage data) sets forth Ciena's segment revenue for the respective periods:

	Fiscal Year		
	2009	2010	2011
Revenues:			
Packet-Optical Transport	\$ 299,088	\$ 705,551	\$ 1,121,811
Packet-Optical Switching	165,705	112,058	148,395
Carrier Ethernet Solutions	75,125	179,083	127,868
Software and Services	112,711	239,944	343,896
Consolidated revenue	<u>\$ 652,629</u>	<u>\$ 1,236,636</u>	<u>\$ 1,741,970</u>

Segment Profit (Loss)

Segment profit (loss) is determined based on internal performance measures used by the chief executive officer to assess the performance of each operating segment in a given period. In connection with that assessment, the chief executive officer excludes the following non-performance items: selling and marketing costs; general and administrative costs; acquisition and integration costs; amortization of intangible assets; restructuring costs; goodwill impairment; change in fair value of contingent

consideration; interest and other financial charges (net); interest expense; gains (losses) on cost method investments, gain on extinguishment of debt, and provisions (benefit) for income taxes.

The table below (in thousands) sets forth Ciena's segment profit (loss) and the reconciliation to consolidated net income (loss) during the respective periods:

	Fiscal Year		
	2009	2010	2011
Segment profit:			
Packet-Optical Transport	\$ 21,535	\$ 69,319	\$ 191,727
Packet-Optical Switching	60,302	15,662	49,286
Carrier-Ethernet Solutions	(9,575)	28,742	10,849
Software and Services	22,249	56,152	77,422
Total segment profit	94,511	169,875	329,284
Less: non-performance operating expenses			
Selling and marketing	134,527	193,515	251,990
General and administrative	47,509	102,692	126,242
Acquisition and integration costs	—	101,379	42,088
Amortization of intangible assets	24,826	99,401	69,665
Restructuring costs	11,207	8,514	5,781
Goodwill impairment	455,673	—	—
Change in fair value of contingent consideration	—	(13,807)	(3,289)
Add: other non-performance financial items			
Interest expense and other income (loss), net	2,081	(14,702)	(31,904)
Gain (loss) on cost method investments	(5,328)	—	7,249
Gain on extinguishment of debt	—	4,948	—
Less: Provision (benefit) for income taxes	(1,324)	1,941	7,673
Consolidated net loss	<u>\$ (581,154)</u>	<u>\$ (333,514)</u>	<u>\$ (195,521)</u>

Entity Wide Reporting

The following table reflects Ciena's geographic distribution of revenue based on the location of the purchaser, with any country accounting for a significant percentage of total revenue in the period specifically identified. For fiscal 2010 and 2011, revenue attributable to geographic regions outside of the United States is reflected as "Other International" revenue. For the periods below, Ciena's geographic distribution of revenue was as follows (in thousands, except percentage data):

	Fiscal Year		
	2009	2010	2011
United States	\$ 419,405	\$ 744,232	\$ 930,880
United Kingdom	81,784	n/a	n/a
Other International	151,440	492,404	811,090
Total.	<u>\$ 652,629</u>	<u>\$ 1,236,636</u>	<u>\$ 1,741,970</u>

n/a Denotes revenue representing less than 10% of total revenue for the period

The following table reflects Ciena's geographic distribution of equipment, furniture and fixtures, with any country accounting for a significant percentage of total equipment, furniture and fixtures specifically identified. Equipment, furniture and fixtures attributable to geographic regions outside of the United States and Canada are reflected as "Other International."

For the periods below, Ciena's geographic distribution of equipment, furniture and fixtures was as follows (in thousands, except percentage data):

	October 31,		
	2009	2010	2011
United States	\$ 47,875	\$ 63,675	\$ 60,848
Canada	n/a	45,103	47,424
Other International	13,993	11,516	14,286
Total	<u>\$ 61,868</u>	<u>\$ 120,294</u>	<u>\$ 122,558</u>

n/a Denotes equipment, furniture and fixtures representing less than 10% of total equipment, furniture and fixtures

For the periods below, customers accounting for at least 10% of Ciena's revenue were as follows (in thousands, except percentage data):

	Fiscal Year		
	2009	2010	2011
AT&T	\$ 128,233	\$ 267,422	\$ 269,858

(20) OTHER EMPLOYEE BENEFIT PLANS

Effective March 1, 2010, Ciena has a Defined Contribution Pension Plan that covers all of its Canada-based employees who are not part of an excluded group. Total contributions (employee and employer) cannot exceed the lesser of 18% of participant earnings and an annual dollar limit (\$22,970 CAD for 2011). This plan includes a required employer contribution of 1% for all participants and a 50% matching of participant contributions up to a total annual maximum of \$3,000 CAD per employee. During fiscal 2010 and 2011, Ciena made matching contributions of approximately \$2.5 million CAD and \$4.3 million CAD, respectively.

Ciena has a 401(k) defined contribution profit sharing plan. The plan covers all U.S. based employees who are not part of an excluded group. Participants may contribute up to 60% of pre-tax compensation, subject to certain limitations. The plan includes an employer matching contribution equal to 50% of the first 6% an employee contributes each pay period. Ciena may also make discretionary annual profit contributions up to the IRS regulated limit. Ciena has made no profit sharing contributions to date. During fiscal 2009, 2010 and 2011, Ciena made matching contributions of approximately \$3.2 million, \$3.4 million and \$3.9 million, respectively.

(21) COMMITMENTS AND CONTINGENCIES

Ontario Grant

Ciena was awarded a conditional grant from the Province of Ontario in June 2011. Under this strategic jobs investment fund grant, Ciena can receive up to an aggregate of CAD\$25.0 million in funding for eligible costs relating to certain next-generation, coherent optical transport development initiatives over the period from November 1, 2010 to October 31, 2015. Ciena anticipates receiving disbursements, approximating CAD\$5.0 million per fiscal year over the period above. Amounts received under the grant are subject to recoupment in the event that Ciena fails to achieve certain minimum investment, employment and project milestones. During fiscal 2011, Ciena recorded a CAD\$5.3 million benefit as a reduction in research and development expenses because it believes it has complied with the grant conditions entitling it to this amount, of which CAD\$5.0 million was received in fiscal 2011.

Foreign Tax Contingencies

Ciena has received assessment notices from the Mexican tax authorities asserting deficiencies in payments between 2001 and 2005 related primarily to income taxes and import taxes and duties. Ciena has filed judicial petitions appealing these assessments. As of October 31, 2010 and 2011, Ciena had accrued liabilities of \$1.4 million related to these contingencies, which are reported as a component of other current accrued liabilities. As of October 31, 2011, Ciena estimates that it could be exposed to possible losses of up to \$5.8 million, for which it has not accrued liabilities. Ciena has not accrued the additional income tax liabilities because it does not believe that such losses are probable. Ciena has not accrued the additional import

taxes and duties because it does not believe the incurrence of such losses are probable. Ciena continues to evaluate the likelihood of probable and reasonably possible losses, if any, related to these assessments. As a result, future increases or decreases to accrued liabilities may be necessary and will be recorded in the period when such amounts are estimable and more likely than not (for income taxes) or probable (for non-income taxes).

In addition to the matters described above, Ciena is subject to various tax liabilities arising in the ordinary course of business. Ciena does not expect that the ultimate settlement of these liabilities will have a material effect on our results of operations, financial position or cash flows.

Litigation

On July 29, 2011, Cheetah Omni LLC filed a complaint in the United States District Court for the Eastern District of Texas against Ciena and several other defendants, alleging, among other things, that certain of the parties' products infringe upon multiple U.S. Patents relating to certain reconfigurable optical add-drop multiplexer (ROADM) technologies. The complaint seeks injunctive relief and damages. On November 8, 2011, Ciena filed an answer and counterclaims to Cheetah Omni's amended complaint. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties' products infringe U.S. Patent 6,542,673 (the "'673 Patent'"), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. Ciena filed an answer to the complaint and counterclaims against Graywire on April 17, 2009. On April 27, 2009, Ciena and certain other defendants filed an application for inter partes reexamination of the '673 Patent with the U.S. Patent and Trademark Office (the "PTO"). On the same date, Ciena and the other defendants filed a motion to stay the case pending reexamination of all of the patents-in-suit. On July 17, 2009, the district court granted the defendants' motion to stay the case. On July 23, 2009, the PTO granted the defendants' application for reexamination with respect to certain claims of the '673 Patent and, on December 17, 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims. On February 28, 2011, Ciena and the other defendants filed an appeal with respect to certain aspects of the PTO's determination. Separately, on March 17, 2011, the PTO granted a third party application for ex parte reexamination with respect to certain claims of the '673 Patent and, on September 2, 2011, the PTO issued a non-final rejection of the validity of those claims. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously in the event the stay of the case is lifted.

As a result of its June 2002 merger with ONI Systems Corp., Ciena became a defendant in a securities class action lawsuit filed in the United States District Court for the Southern District of New York in August 2001. The complaint named ONI, certain former ONI officers, and certain underwriters of ONI's initial public offering (IPO) as defendants, and alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements (such as undisclosed commissions or stock stabilization practices) in ONI's registration statement and by engaging in manipulative practices to artificially inflate ONI's stock price after the IPO. The complaint also alleges that ONI and the named former officers violated the securities laws by failing to disclose the underwriters' alleged compensation arrangements and manipulative practices. No specific amount of damages has been claimed. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. The former ONI officers have been dismissed from the action without prejudice. In July 2004, following mediated settlement negotiations, the plaintiffs, the issuer defendants (including Ciena), and their insurers entered into a settlement agreement. The settlement agreement did not require Ciena to pay any amount toward the settlement or to make any other payments. While the partial settlement was pending approval, the plaintiffs continued to litigate their cases against the underwriter defendants. In October 2004, the district court certified a class with respect to the Section 10(b) claims in six "focus cases" selected out of all of the consolidated cases, which cases did not include Ciena, and which decision was appealed by the underwriter defendants to the U.S. Court of Appeals for the Second Circuit. On February 15, 2005, the district court granted the motion for preliminary approval of the settlement agreement, subject to certain modifications, and on August 31, 2005, the district court issued a preliminary order approving the revised stipulated settlement agreement. On December 5, 2006, the U.S. Court of Appeals for the Second Circuit vacated the district court's grant of class certification in the six focus cases. On April 6, 2007, the Second Circuit denied plaintiffs' petition for rehearing. In light of the Second Circuit's decision, the parties agreed that the settlement could not be approved. On June 25, 2007, the district court approved a stipulation filed by the plaintiffs and the issuer defendants terminating the proposed settlement. On August 14, 2007, the plaintiffs filed second amended complaints against the defendants in the six focus cases. On September 27, 2007, the plaintiffs filed a motion for class certification based on their amended complaints and allegations. On March 26, 2008, the district court denied motions to dismiss the second amended complaints filed by the defendants in the six focus cases, except as to Section 11 claims raised by those plaintiffs who sold their securities for a price in excess of the initial offering price and those who purchased outside the previously certified class period. Briefing on the plaintiffs' motion for class certification in the focus

cases was completed in May 2008. That motion was withdrawn without prejudice on October 10, 2008. On April 2, 2009, a stipulation and agreement of settlement between the plaintiffs, issuer defendants and underwriter defendants was submitted to the Court for preliminary approval. The Court granted the plaintiffs' motion for preliminary approval and preliminarily certified the settlement classes on June 10, 2009. The settlement fairness hearing was held on September 10, 2009. On October 6, 2009, the Court entered an opinion granting final approval to a settlement among the plaintiffs, issuer defendants and underwriter defendants, and directing that the Clerk of the Court close these actions. All appeals of the opinion granting final approval have been either resolved or dismissed, except one. On August 25, 2011, on remand from the Second Circuit, the District Court determined that the last remaining appellant did not have standing to assert his appeal. Due to the inherent uncertainties of litigation and because the settlement remains subject to appeal, the ultimate outcome of the matter is uncertain.

In addition to the matters described above, Ciena is subject to various legal proceedings, claims and litigation arising in the ordinary course of business. Ciena does not expect that the ultimate costs to resolve these matters will have a material effect on its results of operations, financial position or cash flows.

Operating Lease Commitments

Ciena has certain minimum obligations under non-cancelable operating leases expiring on various dates through 2021 for equipment and facilities. Future annual minimum rental commitments under non-cancelable operating leases at October 31, 2011 are as follows (in thousands):

	Year ended October 31,
2012	\$ 29,884
2013	26,683
2014	21,757
2015	10,969
2016	4,924
Thereafter	5,260
Total	<u>\$ 99,477</u>

Rental expense for fiscal 2009, fiscal 2010 and fiscal 2011 was approximately \$14.7 million, \$22.2 million and \$25.5 million, respectively. In addition, Ciena paid approximately \$2.2 million, \$2.2 million and \$2.4 million during fiscal 2009, fiscal 2010 and fiscal 2011, respectively, related to rent costs for restructured facilities and unfavorable lease commitments, which were offset against Ciena's restructuring liabilities and unfavorable lease obligations. The amount for operating lease commitments above does not include insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are variable and are not expected to have a material impact on Ciena's financial condition, results of operations or cash flows.

Purchase Commitments with Contract Manufacturers and Suppliers

As of October 31, 2011, Ciena has purchase commitments of \$235.5 million. Purchase commitments relate to purchase order obligations to contract manufacturers and component suppliers for inventory. In certain instances, Ciena is permitted to cancel, reschedule or adjust these orders. Consequently, only a portion of the amount reported as purchase commitments relates to firm, non-cancelable and unconditional obligations.

(22) SUBSEQUENT EVENTS

Ciena performed an evaluation of events that have occurred subsequent to the end of its fiscal year through the date that the consolidated financial statements were issued. Except as described below, there have been no subsequent events that occurred that would require disclosure in the consolidated financial statements.

New Linthicum Headquarters Lease

Ciena has entered into a Lease Agreement (the Lease) dated November 3, 2011, with W2007 RDG Realty, L.L.C. (Landlord), relating to office space for its new corporate headquarters in the building located at 7035 Ridge Road, Hanover, Maryland (Building 1) and a building to be built at 7031 Ridge Road, Hanover, Maryland (Building 2), consisting of an aggregate agreed-upon rentable area of approximately 154,100 square feet.

The Building 1 lease commencement date will be the earlier of the date of Ciena's occupancy or substantial completion of the improvements to the premises in accordance with the terms of the Lease, but in either case no earlier than June 1, 2012. The

Building 1 rent commencement date will be the later of September 1, 2013 or substantial completion of improvements to the premises in accordance with the terms of the Lease. The Building 2 lease commencement date and rent commencement date will be upon Landlord's delivery of the premises following substantial completion of the construction of Building 2 and improvements to the premises in accordance with the terms of the Lease (expected to be no later than November 15, 2012). Subject to adjustment and earlier termination as provided in the Lease, the Lease (which relates to both Building 1 and Building 2) will expire 14 years and eight months from the Building 1 lease commencement date. Ciena has the option to renew the Lease for two additional periods of five years each. Ciena also has a right of first offer relating to additional space in the complex of buildings that includes Building 1 and Building 2.

If the Building 2 rent commencement date coincided with the Building 1 rent commencement date, the initial annual basic rent would be approximately \$3.8 million, exclusive of certain customary operating expenses. The annual basic rent rate will escalate at a rate of two percent (2.0%) each year, and beginning in calendar year 2014 Ciena will be responsible for increases in certain operating expenses and real estate taxes over the amounts incurred in calendar year 2013. The Lease also provides that Landlord will contribute towards costs incurred for certain tenant improvements to Ciena's premises in Building 1 and Building 2 and will bear all costs for the construction of Building 2.

Ciena has the right to terminate the Lease if certain milestones with respect to the construction of Building 2 are not achieved in a timely manner. Ciena also has the one-time right to terminate the Lease with respect to all or a portion of the leased premises at any time after the tenth (10th) year, provided that Ciena has not exercised its renewal option, pays a termination fee to Landlord, and complies with certain requirements as set forth in the Lease. Landlord has the right to terminate the Lease upon an event of default, which includes Ciena's failure to pay rent, failure to provide an estoppel certificate, failure to maintain insurance, failure to release mechanic's liens, uncured breach of its other obligations under the Lease, or insolvency.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended). Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

Changes in Internal Control over Financial Reporting

As described elsewhere in this report, we acquired the MEN Business on March 19, 2010 and worked to integrate the MEN Business into our operations during fiscal 2010 and 2011. While the process of integrating the MEN Business resulted in changes to our internal control over financial reporting, there was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. The MEN Business was part of our evaluation of the effectiveness of internal control over financial reporting in our "Report of Management on Internal Control Over Financial Reporting" below as of October 31, 2011.

Report of Management on Internal Control Over Financial Reporting

The management of Ciena Corporation is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934).

The internal control over financial reporting at Ciena Corporation was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Ciena Corporation;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America;

- provide reasonable assurance that receipts and expenditures of Ciena Corporation are being made only in accordance with authorization of management and directors of Ciena Corporation; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management of Ciena Corporation assessed the effectiveness of the company's internal control over financial reporting as of October 31, 2011. Management based this assessment on criteria for effective internal control over financial reporting described in "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management determined that, as of October 31, 2011, Ciena Corporation maintained effective internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee of our Board of Directors.

PricewaterhouseCoopers LLP, independent registered public accounting firm, who audited and reported on the consolidated financial statements of Ciena Corporation included in this annual report, has also audited the effectiveness of Ciena Corporation's internal control over financial reporting as of October 31, 2011, as stated in its report appearing under Item 8 of Part II of this annual report.

/s/ Gary B. Smith

Gary B. Smith
President and Chief Executive Officer
December 22, 2011

/s/ James E. Moylan, Jr.

James E. Moylan, Jr.
Senior Vice President and Chief Financial Officer
December 22, 2011

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information relating to Ciena's directors and executive officers is set forth in Part I of this annual report under the caption Item 1. "Business—Directors and Executive Officers."

Additional information concerning our Audit Committee and regarding compliance with Section 16(a) of the Exchange Act responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2012 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

As part of our system of corporate governance, our board of directors has adopted a code of ethics that is specifically applicable to our chief executive officer and senior financial officers. This Code of Ethics for Senior Financial Officers, as well as our Code of Business Conduct and Ethics, applicable to all directors, officers and employees, are available on the corporate governance page of our web site at <http://www.ciena.com>. We intend to satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of the Code of Ethics for Senior Financial Officers, by posting such information on our web site at the address above.

Item 11. Executive Compensation

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2012 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2012 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2012 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

Item 14. Principal Accountant Fees and Services

Information responsive to this item is incorporated herein by reference to Ciena's definitive proxy statement with respect to our 2012 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules

- (a)
 - 1. The information required by this item is included in Item 8 of Part II of this annual report.
 - 2. The information required by this item is included in Item 8 of Part II of this annual report.
 - 3. Exhibits: See Index to Exhibits, which is incorporated by reference in this Item. The Exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this annual report.
- (b) Exhibits. See Index to Exhibits, which is incorporated by reference in this Item. The Exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this annual report.
- (c) Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on the 22nd day of December 2011.

Ciena Corporation

By: /s/ Gary B. Smith

Gary B. Smith

President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

Signatures	Title	Date
<u>/s/ Patrick H. Nettles, Ph.D.</u> Patrick H. Nettles, Ph.D.	Executive Chairman of the Board of Directors	December 22, 2011
<u>/s/ Gary B. Smith</u> Gary B. Smith (Principal Executive Officer)	President, Chief Executive Officer and Director	December 22, 2011
<u>/s/ James E. Moylan, Jr.</u> James E. Moylan, Jr. (Principal Financial Officer)	Sr. Vice President, Finance and Chief Financial Officer	December 22, 2011
<u>/s/ Andrew C. Petrik</u> Andrew C. Petrik (Principal Accounting Officer)	Vice President, Controller	December 22, 2011
<u>/s/ Stephen P. Bradley, Ph.D.</u> Stephen P. Bradley, Ph.D.	Director	December 22, 2011
<u>/s/ Harvey B. Cash</u> Harvey B. Cash	Director	December 22, 2011
<u>/s/ Bruce L. Claflin</u> Bruce L. Claflin	Director	December 22, 2011
<u>/s/ Lawton W. Fitt</u> Lawton W. Fitt	Director	December 22, 2011
<u>/s/ Patrick T. Gallagher</u> Patrick T. Gallagher	Director	December 22, 2011
<u>/s/ Judith M. O'Brien</u> Judith M. O'Brien	Director	December 22, 2011
<u>/s/ Michael J. Rowny</u> Michael J. Rowny	Director	December 22, 2011

ciena : the network specialist

1201 Winterson Road, Linthicum, Maryland 21090-2205 (410) 865-8500 (800) 921-1144 ciena.com

002CSN0295



corporate headquarters

Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090-2205
Telephone: (800) 921-1144
or (410) 865-8500
www.Ciena.com

annual meeting

Ciena's annual meeting of shareholders will be held at 3:00 PM (Eastern) on Wednesday, March 21, 2012 at The Westin Baltimore Washington Airport, 1110 Old Elkridge Landing Road, Baltimore, MD

independent registered public accounting firm

PricewaterhouseCoopers LLP
Baltimore, MD

outside counsel

Hogan Lovells US LLP
Baltimore, MD

transfer agent

Computershare Trust Company, N.A.
P.O. Box 43078
Providence, RI 02940-3078
Stockholder Inquiries: (781) 575-2879
www.Computershare.com

common stock market data

Since its initial public offering on February 7, 1997, Ciena's Common Stock has traded on the Nasdaq Stock Market under the symbol "CIEN".

investor relations

For additional copies of this report or other financial information, contact:
Investor Relations
Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090-2205
Telephone: (888) 243-6223
or (410) 694-5700

Additional information is available on Ciena's website at www.Ciena.com.

operating executive officers

Patrick H. Nettles, Ph.D.

Executive Chairman of the
Board of Directors

Gary B. Smith

President, Chief Executive Officer
and Director

James E. Moylan, Jr.

Chief Financial Officer, Senior Vice
President, Finance

Stephen B. Alexander

Chief Technology Officer, Senior Vice
President, Products and Technology

Rick Dodd

Senior Vice President,
Global Marketing

James Frodsham

Senior Vice President,
Chief Strategy Officer

François Locoh-Donou

Senior Vice President,
Global Products Group

Philippe Morin

Senior Vice President, Global Field
Operations

Andrew Petrik

Vice President and Controller

David M. Rothenstein

Senior Vice President,
General Counsel and Secretary

outside board members

Stephen P. Bradley, Ph.D.

William Ziegler Professor of Business
Administration Emeritus
Harvard Business School

Harvey B. Cash

General Partner
InterWest Partners

Bruce L. Claflin

Chairman
AMD Corporation

Lawton W. Fitt

Retired Partner
Goldman Sachs

Patrick T. Gallagher

Chairman
Ubiquisys Ltd.

Judith M. O'Brien

Business Advisor

Michael J. Rowny

Chairman
Rowny Capital